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STUDIES IN THE SOCIAL SIGNIFICANCE OF ADULT EDUCATION IN THE UNITED STATES

A series of studies issued by the American Association for Adult Education with the aid of funds made available by the Carnegie Corporation of New York

PUBLISHED

1. *Listen and Learn* by Frank Ernest Hill
2. *Why Forums?* by Mary L. Ely
3. *Enlightened Self-Interest* by Dorothy Rowden
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16. *The Church and Adult Education* by Bernard E. Meland
17. *The Agrarian Revival* by Russell Lord

Continued on page 171

THE EXTENSION OF UNIVERSITY TEACHING

BY JAMES CREESE

AMERICAN ASSOCIATION FOR ADULT EDUCATION

NEW YORK · 1941

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Foreword

THE author of this report has visited thirty or more colleges and universities, receiving more kindness and help than can be conveniently acknowledged in a short preface. He remembers with appreciation the advice and encouragement given by Professor Walton S. Bittner of Indiana University, Dean Carl F. Huth of the University of Chicago, Professor W. H. Lighty and Dean Frank O. Holt of the University of Wisconsin, Professor Leon J. Richardson of the University of California, Mr. Russell M. Grumman of the University of North Carolina, Mr. J. O. Keller of Pennsylvania State College, and many other administrative and teaching officers of extension divisions. He has had assistance also from Mr. Frederick A. Woodward, Dr. Leon Brody, and Miss Doris Soibelman in compiling data pertaining to the history of university extension and to the postgraduate education of professional groups.

The extramural responsibilities of colleges and universities have been the subject of several comprehensive reports. Alfred L. Hall-Quest's *The University Afield,* published by The Macmillan Company, was one of the basic surveys made before the establishment of the American Association for Adult Education. A companion study, *University Teaching by Mail,* by W. S. Bittner and H. F. Mallory, gave an admirable and complete

account of the principles and problems of instruction by correspondence. In the *Handbook of Adult Education in the United States* and in many of the studies of the social significance of adult education published since 1937 by the American Association for Adult Education, the scope and special functions of university agencies for adult education are critically described. The present report borrows freely and without specific acknowledgment from those studies. It does not review ground already thoroughly covered in such reports as Russell Lord's *The Agrarian Revival,* T. R. Adam's *The Worker's Road to Learning,* Frank Ernest Hill's *Listen and Learn: Fifteen Years of Adult Education on the Air,* and Mary L. Ely's *Why Forums.*

I.C.

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For their work continueth
And their work continueth
Broad and deep continueth
Great beyond their knowing!

RUDYARD KIPLING
Envoi to *Stalky & Co.*

University Dilemmas

TODAY a census of the men and women for whom study is a serious but not a primary occupation, people who are workers by day and students in their free time, runs into the millions. Although no exact figures are available, it has been estimated that nearly two million persons are investing their time and money in correspondence courses conducted by private proprietary schools which are operated for profit; that another million or more are studying in public evening schools, part-time and continuation schools; and that there may be two hundred thousand more in non-academic schools like those meeting in Y.M.C.A.'s. Fifty-two university extension departments composing the membership of the National University Extension Association report an enrollment of 120,000 in extension classes, 50,000 active correspondence students in courses on the college level, 50,000 attendants at short courses and institutes, and audiences of 220,000 for lecture series under university auspices. The totals, already overwhelming, are far from complete for we have not yet named the urban colleges and universities nor the agricultural extension services of the colleges of agriculture, this last being surely the most extensive enterprise of adult education in the world.

It is not to be believed that so widespread an interest in education, involving so great a portion of our population, will not mark permanently the whole scheme of American education.

To impart motion to any one part of a related system, where members are bound one to another, is, obviously, to set up motion in all parts and in every member; the resultant motion may at one place be different from that at another, it may have a different period, or even a contrary direction; but no serious movement—neither the wholesale popularization of higher education nor the spontaneous action of adult education—can occur without some compensating turn in the rest of the closely related system. Grammar schools are bound to secondary schools, they to the colleges, and so to the universities and postgraduate or professional schools. What touches one part, touches all.

The emergency of war, not a distant war but one perilously close, makes clear the necessity for unity and for the prompt training of men for war duty, both physical and intellectual. The unity sought is not that of imposed authority but the natural unity of a people prepared by a complete and generous education "to perform justly, skillfully, and magnanimously all the offices both private and public of peace and war."

It is plain at such times, if it is not always plain, that schools, colleges, and universities enjoy no isolation, or security of remoteness, from great immediate responsibilities and perils. Their response to a national emergency will demonstrate their vitality and will, perhaps, clarify their purposes.

THE PARABLE OF ARCHIMEDES

There is now a parable in the story of Archimedes, the mathematician of Syracuse, who, stooping to draw a geometrical figure on the sand, was struck down and killed, run through the body by a Roman soldier. This was only an absent-minded scholar, himself defenseless, whose inventions had prolonged the siege

of Syracuse three years. His neighbors knew that he was a distinguished scientist; perhaps sometimes they resented his superior wisdom and were amused by his idiosyncrasies. They told stories of his odd ways, none more droll than that of the time when he rushed into the street in broad daylight without his clothes, straight from the bath, crying that he had found a way to test the true value of the king's crown! Practical men downtown in Syracuse knew the value of his inventions and many times tried to get him to publish a full account of these devices, but Archimedes, either reluctant to interrupt his studies or holding it undignified to teach in the market place, had persisted in writing only technical dissertations, learned papers admired by his colleagues and understood only by them, on the dimensions of spheres and cylinders or on measuring the circumference of a circle in terms of its diameter. That was his proper function, to which he would have been untrue if he had neglected it.

But he had been called into consultation by the government during the emergency and had served with his majesty's forces as an expert on the engines of war. His answers to specific questions often opened extremely interesting passages of speculation, as when he said to the king, meaning what he said quite literally and in no merely metaphorical sense, "Give me a place to stand and I will move the world."

The Roman general Marcellus, more enlightened than some conquerors, had given orders that Archimedes was to be spared in the massacre after the fall of Syracuse, but a common soldier with a spear in his hand could scarcely be expected to stop in his work to inquire of every old gentleman crouched on the sand if he was Archimedes of Syracuse.

WHEN UNIVERSITIES ARE SUPPRESSED

Suppression or destruction of universities may be counted among the incidents of violent change of government. Men of learning are no luckier than their countrymen. The schools have some power to preserve the intangibles of civilization, keeping the less destructible defenses and fortifying a new generation for freedom. So scholars and teachers, even mild men and obscure, have been sent to concentration camps or into exile, students have been dispersed, universities closed, libraries burned, and laboratories locked. It is an old story of which we have poignant reminders.

Under the Commonwealth, both Oxford and Cambridge Universities, dulled as they were considered to be by antiquated and ritualistic practices, were in danger of being abolished by act of Parliament because of their adherence to the royal cause; when the French Revolution effaced the privileged establishments of the old regime, it abrogated also the rights of the university corporations; political storms, sweeping over Europe at the turn from the eighteenth to the nineteenth century, caused many waning universities in Germany to disappear; and again after the World War, though the republican constitution of Germany left the universities untouched, there were lost or impaired certain essential parts of the system of higher education: among them the corps of *Privatdozenten* who were independent investigators and lecturers, not directly accountable to the state, whose presence protected academic freedom. Now in recent years, by the Soviet revolution in Russia, by the Fascist revolution in Italy, and by the Nazi revolution in Germany, faculties have had their freedom confiscated by the state agencies of propaganda, and the

academies of each of these nations have had their traditions of independence revoked. That a conquest may be even more cruel, Warsaw and Krakow show; and Oslo, too, where university buildings were taken as staff headquarters by an army of occupation.

UNIVERSITIES, EUROPEAN AND AMERICAN

In the darkness of a new time of revolution and conquest, it is impossible to foresee how dire may be the fate of universities in Europe. They are bound to be impoverished, stripped of men as well as means, and, perhaps for a long while, denied their essential freedom.

On this side, it is time to dismiss petty problems and trivial altercations, to cure some of the bitter rivalries that have divided education, and to discover what instruments we have in our schools to serve the special purposes of the times, and what instruments are missing. Partial, merely temporary, narrowly scholastic, or fanatical definitions will not do.

The main tradition in American education is one of opportunity for all and of freedom from oppressive authority. "One praise," James Bryce said, "which has often been given to the universities of Scotland may be given to those of America. While the German universities have been popular but not free [as regards self-government in matters of education], while the English universities have been free but not popular, the American universities are both free and popular." When he revised *The American Commonwealth* in 1910, he supplemented his chapter on higher education in America, confirming his earlier verdict:

> It has been well said by one of the most acute and large-minded of all recent visitors to the United States (Professor Dr. Lamprecht of Leipzig in his *Amerikana*) that nowhere in the world do university

teachers feel more strongly that the first object of their devotion is Truth. . . . To one who looks back on the last twenty years, the universities seem to have grown not only in their resources and the number of their students, but also in dignity and influence. . . . Through the always widening circle of their alumni they are more closely in touch than ever before with all classes in the community. The European observer can express now with even more conviction than he could twenty years ago the opinion that they constitute one of the most powerful and most persuasive forces working for the common good of the country.

AFTER FORTY YEARS

The colleges of the United States are now so numerous, so widely distributed geographically, and so varied in kind as to make possible at last the realization of an American dream of educational opportunity for every qualified student. Not less than a million and a quarter young people are registered for regular winter terms in work of college grade, 13 per cent of all Americans between the ages of nineteen and twenty-two. There are seventeen hundred colleges whose graduates in one year total one hundred and seventy-five thousand. Two or three large metropolitan universities have in senior classes more students than were graduated from all the colleges of the country forty years ago when Mr. Bryce wrote. More than a quarter of a million are enrolled for college studies in university extension classes and for study by correspondence with university departments: and nearly four hundred thousand attend summer sessions on college campuses.

The Chancellor of New York University has remarked that the one central fact in the history of higher education in the past twenty years, during which time he has headed three universities

in three different parts of the country, North Carolina, Illinois, and New York, is the tremendous popularization of higher education throughout the United States. The penetration of higher education by increasing multitudes is, in his words, "a phenomenon without parallel in the social history of the world."

"SEVEN CAMPUSES"

It is almost impossible to picture one of the now mammoth institutions, a modern American university, and to find a single, simple, motivating ideal which will bring into focus its restless, diversified, complex activities.

One way to see it is from the point of view of the alumnus, through whom, as Mr. Bryce said, the universities have direct influence on American life. What news and reports of the university interest the alumnus?

The University of California has among its publications a quarterly alumni news sheet, "Seven Campuses." The name itself is significant. This is a university which expends in one year $13,568,000 on seven campuses, at Berkeley, Los Angeles, Davis, San Francisco, Riverside, La Jolla, and Mt. Hamilton.

The alumni association of this university, according to the alumni president at the close of a Banner Year, had "attained the greatest membership ever attained by this or any other alumni association," having one-third of all living alumni enlisted in a paid membership of 29,000; their alumni magazine had won the seventh consecutive award of merit in competition with leading alumni magazines of the United States; in the year they had subscribed $200,000 to a dormitory fund; they had increased by $100,000 a Life Membership Endowment Fund, passing a half million total; they had offered 80 scholarships of $250 each to

entering freshmen; and they had contributed funds for the maintenance of university radio programs and for the support of a placement or employment bureau. Lectures to alumni groups of one hundred or more were made in seven cities by the President of the university and members of the history and economics faculties; four hundred alumni attended an institute at the University Club in Los Angeles where the President and other members of the faculty spoke on "The Pacific Nations in a World at War"; 8,000 attended a Jamboree and Dance at the Golden Gate International Fair.

Fifteen per cent of the Phi Beta Kappa keys were awarded to boys who had worked their way through college; the National Academy of Science had elected two more members of the university faculty, giving this university a distinguished delegation of twenty-three, "the largest number for any American university, with the exception of Harvard, which has thirty-seven"; the university's radiation laboratory is receiving a million dollars from the Rockefeller Foundation for the construction of a greater cyclotron to be completed in four years: these are the items of news in which the editor of a university bulletin expects the alumni to be interested at the end of an academic year.

A buoyant, competitive spirit, hardly the serene mood of contemplative scholarship, moves from column to column in the news of the university, from the athletic news of a first page (California Bears May Be Contenders for Football Title), through alumni association news, undergraduate news, and even faculty news.

There are fifty-eight California counties; forty-five sent students to the campus at Los Angeles and fifty-six to Berkeley. Are new four-year colleges needed elsewhere in the state? The Presi-

dent of the university answers: "The State of California is already offering education above the high school level to a considerably greater percentage of its college-age youth than any other state in the Union. The development of seven state colleges and more than two score junior colleges on top of the university structure has brought the bill for college lands and buildings in California to three and one-half times the average of the forty-eight states, and to 12 per cent more than any other state."

How does that university define its greater duties? Again the President answers: "Our task is to know and to affirm the values that make it worth while to go on living. . . . The crisis of the democracies may produce something beyond ill, if out of it comes a resurgent, fervent affirmation of faith in the value of the individual. . . . The core of democracy is the self-respect of the humble. . . . Unless our loyalty and devotion to this free community is more powerful than the fanaticism of the Communist for the class war, or the bigotry of the Nazi for the Nordic race, then they and not we will shape the future of the world. . . . Democracy is the resolution to remove those actual and unnecessary divergences of interest that are the springs of class war; to replace class consciousness by public sensitiveness; to stimulate the willingness of men to recognize, without envy, inequality of function and also of talent."

THE CHARACTERISTIC TONE OF COLLEGE LIFE

Out of a medley of college themes come certain characteristic and stirring refrains: a vigorous and even strident note of competition; an institutional pride in the attainments of the university, its teams, its more self-reliant students, its scholars and investigators, all holding their own against all comers; an identification

of the individual with something greater than himself; and an assertion of public duty. Is this the scholar's idea of a university? At least the air is a familiar one, not in this one place only, but on seventeen hundred campuses.

Discordant notes are there too; an uncomfortable suggestion of great cost, a hint that local communities and some classes of society are not touched as they might like to be by the university and consider it in some way alien, a noisome sign that alumni may be more attentive to the athletic and the social than to the intellectual affairs of the university. When people speak of colleges and universities with discontent, these are among the charges brought.

"ECONOMICAL AND EFFICIENT EDUCATION"

Education everywhere meets a competition for public funds which has never before been so severe as it is now. State budgets have increased three and four fold in less than twenty years. The taxpayer, conscious of the cost of public education, to which is added the cost of unemployment relief and now of national defense, may not question that it is the duty of the state to provide free training of its young people; but how far can the state afford to go?

Between 1917 and 1935, the cost of the New York State Educational System increased from $73,900,000 to $277,900,000. The Chamber of Commerce of the State of New York, approving unanimously a report of its Committee on Economical and Efficient Education, observes that education can not be so unlike other business as not to need periodically a thorough review and some important changes, considered with an open mind, pretty

much regardless of the past: "We are entirely out of sympathy with the idea that the State must support youngsters and keep them in school until they reach a certain age regardless of what kind of work they are doing and whether they have the mental ability to make it worth while giving them higher work. It seems to us that there is a definite line which must be recognized, and that is the line between the amount of education it requires to kill illiteracy and the amount of education we give beyond that point. We must not have an illiterate people; all but defectives must be taught to read, write, and figure reasonably well. But there is a fair question as to how many should go farther"—at public expense.

The Chamber too has something to say about the objectives of education: that the great purpose for which the schools were founded was to strengthen and preserve the state by making better and abler citizens; other benefits, many and important, are secondary. It is the opinion of the Chamber, given in a formal pronouncement on education, that, by and large, states are not preserved by culture or by education or by knowledge; that they stand on character, morals, and physical well-being; that a review of history indicates that as culture rises, morals and physical well-being go down, and that often the disintegration of the state has followed.

The general acceptance of principles implicit in this statement by one of the oldest and more influential associations of businessmen suggests a revolutionary change in American education, both with respect to popular, universal education and with respect to the freedom of education from governmental control.

Since the voters of a community pay the bills for education and are acutely aware of them, they may and often do assert a right to say what shall be taught and who shall teach, or at least to say what shall not be taught and who shall not teach.

This has been demonstrated lately in the courts of New York City. A judge, the mayor, and the council of the city decreed that a faculty appointment unsatisfactory to them, opposed by both Protestant and Catholic bishops, criticized by many, perhaps by a majority of the people, should be rescinded. To be sure, the appointment had been recommended by the proper academic authorities and made by the city's board of higher education; but the judge, on a taxpayer's suit, ordered that the appointment be voided as harmful to "public health, safety, and morals," while the mayor and the council refused to recognize at any future time, salary requisitions for this particular appointee. The question thus presented formally in a court of law is obviously not just a local issue: it concerns the security and privileges of each faculty member in every public college and university.

Public and private institutions find themselves in a predicament which is the same for both. The publicly supported school must have the good will of a state or a municipality; the privately endowed college enjoys a precarious exemption from taxation and will have private funds only to the extent that the prosperity and good will of the public allow. Neither is defended by any barrier of nature against misunderstanding or public resentment. Research, graduate study, and all the specialized investigations upon which scholarship depends and in which scholars engage, are expensive. Unless the public understands what is being done

and values it, the universities will be penalized and their influence for public good will be reduced.

We have plenty of evidence that scholars and intellectuals constitute a vulnerable minority. Where there is no room for minority opinion, there is little room for scholarship or for higher education.

THE PEOPLE VS. EDUCATION, LTD.

It is a fact, strange and humorous, that the American people believe, with an almost devout belief, in the efficacy of education, but distrust and ridicule the teacher. These things have been ordered better in Europe, at least we thought they had been. In our folklore, the professor is a character of a comic valentine. His mortarboard and gown are familiar features of the political cartoon. However learned he may be in government and finance, however attentive his smaller audiences may be, he is, before the great public, a vulnerable man.

Some of the mockery is in good humor, some of it is merely conventional, some of it is in remembrance of harsh discipline endured in school and of lessons arbitrarily, even if benevolently, imposed; but whatever its source, or however childish its origin, there is in it no inconsiderable element of threatening resentment. Resentment shows itself in the attitude of the businessman even though he is a college graduate. It shows in the proceedings of legislatures, councils, and courts. Thoughtful leaders among working men and women may say that they can not afford to go to college or may hesitate to send their children, let alone their own representatives, when it is thought, however unfairly, that they may be exposed to an economic philosophy which they distrust. Whether colleges are "hot-beds of communism," as almost

every college has been accused of being, or are cold-frames of another sort, is not the immediate issue; the point here is that they are subjected to bitter criticism from both extremes. Labor does not speak alone in saying to scholars and teachers, "You need to be exposed to ordinary people. You need to have your theories tested by the crude questions of men and women who work with their hands and judge theories by practical usefulness. You will find that you have to use words which mean something to people; you will have to think anew as to whether old ideas are right ideas; you will have to explore new problems in a new way."[1]

It is not too much that the people ask, that the universities and colleges, which can be objective and impartial, undertake to reconcile, so far as education can, some of the divergent purposes of academic and everyday life and, particularly, to bring practical considerations and theoretical considerations into useful and acceptable relationship. To that end, adult education, in which the universities have had long and varied experience, may be especially good and effective. It is even conceivable that, in the long run, adult education may have its greatest and most durable social value in its effect on formal education.

THE JUNTO AND THE UNIVERSITY

More than once in the past, formal education has taken a new direction because of experimental and spontaneous movements quite outside the academic domain.

Fundamental changes in the curricula of colleges often have

[1] Robert J. Watt, International Representative of the American Federation of Labor, "Labor's Educational Program and the Universities," National University Extension Association Proceedings, 1940.

originated with lay groups. One example, so neat that one almost hesitates to use it, is given by Benjamin Franklin's Junto or Leathernapron Club. "Peace being concluded," Franklin wrote of the late seventeen-forties, "I turned my thought again to the affair of establishing an academy. The first step I took was to associate in the design a number of active friends of whom the Junto furnished a part; the rest was to write and publish a pamphlet entitled *Proposals Relating to the Education of Youth in Pennsylvania.*" The curriculum Franklin proposed included more than Greek and Latin and such science and mathematics as could be had through the writings of classical writers. It proposed new, practical subjects—mathematics, physics, chemistry, agriculture and natural history, the management of government, and modern languages. Franklin's associates in the founding of the academy, originators of a university, were the same men who had been his companions in study: a copier of deeds, a self-taught mathematician, a surveyor, a shoemaker, a mechanic, a merchant's clerk, a bookbinder, a couple of printers and one "young gentleman of fortune."

EDUCATION FOR PROFESSIONAL GROUPS

In the modern movement of adult education, the universities have an important role which may be more significant than it has yet been. They have equipment, prestige, experience, ideals, and standards. Most important of all, they have at hand men experienced in teaching and scholars in highly specialized fields. There are other classes of students waiting, superior students who can bring to seminars a hard-won knowledge of the law and government, of business, of medical practice, and of all the arts and trades.

Evening classes, summer institutes, and extension work need not be restricted to those who have missed college or to teachers obliged to accumulate "alertness" credits; many of the universities have realized this and are today offering clinical classes for practicing physicians, institutes in mathematics and pure science, short courses in professional subjects for men already expert in their several fields: journalists, as at Harvard under the Nieman Foundation; statisticians, as at Chicago in an Institute of Statistics; government officers, as at North Carolina under an Institute of Government, which is a private rather than a University venture, but too close to the University to be thought of as entirely separate; industrial executives, as through the Industrial Relations section of Princeton's Department of Economics; foremen and supervisors of industrial production, as in the labor institutes of Wisconsin, Rutgers, and other universities; and parents and teachers, as in the Institute of Euthenics at Vassar.

For forty-nine weeks out of every fifty-two, this kind of higher adult education is conducted at the University of Minnesota through its Center for Continuation Study. "Fifteen years ago," said President Coffman, "I knew all of the statistical techniques in educational inquiry, but when a controversy arose in our institution with some statistical experts in another institution and copies of their letters passed over my desk, I had to admit that I did not know what they were talking about. Nearly every professional man finds himself in the same situation sooner or later, partly because new knowledge has accumulated too rapidly for him to assimilate and partly because of his own inertia. Too few of the university graduates become or remain effective leaders. Nearly every representative of the learned professions experiences an intellectual let-down a few years after he leaves college. No

matter how conscientious professional leaders are, the gap between what they know and what they ought to know widens. We shall encourage doctors to return to the university once every four years; the lawyers, the engineers, the public school leaders, the ministers, and representatives of other groups, we hope, will come at various intervals for genuine study in refresher courses."

ADULT EDUCATION ON THE UPPER LEVEL

The value of adult education at the upper level is not to be realized only where one expects it, in the improvement of professional services within the community; there is another benefit and perhaps in time a greater one, in the effect which it may have upon the formal teaching work of the university itself. Biology, chemistry, economics, and even art may be happily related in adult study; lecturers from more than one faculty department are required; departmental lines fade. The students are not children, docile and to be disciplined; they are mature people who bring to the meeting experience and case material not easily available to their instructors and probably stimulating. Classroom habits are different. The ordinary standards of appraisal are not always applicable; credits and degrees are not always sought. Men and women study because they wish to, and to fill an actual need. They want applicable knowledge, not facts to be memorized or stored away in notebooks until examination time. Standard graduate courses prepared by scholars and for scholars, lectures patiently presented and accepted in undergraduate classrooms, must be at least edited, and the editorial work done with an eye to the requirements of the audience. No sudden reform of education is likely to occur, but a way of departure from merely traditional and standardized methods is indicated.

Scholarship may be given a new and serviceable outlet, and, no less important, the teacher may have a new opportunity to test his knowledge, skill, methods, and standards on mature and critical disciples.

CONTRASTS BETWEEN GRADUATE AND ADULT EDUCATION

It would be hard to decide whether education above the high school level has been more influenced during the past forty or fifty years by the spirit of original investigation and research—the new spirit of the graduate school, leading to a kind of work for which few are really qualified—or by the influx of thousands upon thousands of students.

The four-year college course of three or even two generations ago allowed for the study of Latin and Greek, English literature and rhetoric, mathematics, natural philosophy, chemistry, the elements of deductive logic, moral philosophy, political economy, a little psychology and metaphysics, perhaps some ancient or general history, and sometimes French or German. In the opening year of President Eliot's administration at Harvard two University Courses of Instruction were established for "graduates, teachers, and other competent persons"; thirteen persons took them, but the courses were not repeated.[2] Students seeking advanced study went abroad, chiefly to Germany. They brought home a zeal for investigation which quickened the whole educational process and turned our colleges into universities. "The future of the world," said Thomas Huxley at the formal opening of Johns Hopkins University in 1876, "lies in the hands of those

[2] W. Carson Ryan, *Studies in Early Graduate Education,* Carnegie Foundation for the Advancement of Teaching, 1939.

men who will supply the world with ideas and in some way furnish the masses of mankind who have not had the time or the inclination or capacity to think out things themselves with some theory of things that is not too absolutely inconsistent or too absolutely absurd to serve some practical purpose."

By 1892, three new universities were established, each with a new plan, each with graduate study and research as its center; Johns Hopkins University, Clark University, and the University of Chicago. Since that day the graduate school has had increasing dominance in higher education.

While the numbers of undergraduate college students were multiplying, the undergraduate curricula were being remodeled to match the lines of graduate curricula. The graduate school was for investigators who by their nature are specialists and beget specialists. Knowledge has been broken into fragments; the technical divisions convenient for research have become more and more the departments of instruction. "Rightly or wrongly," said the President of Harvard University in his annual report of 1938, "the feeling has grown up that many departments have planned their requirements for concentration and particularly for honors, with an eye to the student who will make the subject in question his life work. . . . The development of our system of concentration has been perhaps unconsciously towards encouraging the student to anticipate a year of graduate study while still an undergraduate."

University extension and the other forms of adult education in which colleges and universities engage may offer a corrective, a compensating value, if, from the upper levels of professional study down, there can be brought to the college campus a real sense of the work of the world, a more specific appreciation of the

callings to which young people respond and of responsibility for human welfare and the needs of society. I think of a professor of law who, being called upon to give a course on local government, made first a private venture in extension work with municipal officers. He learned that about 4 per cent of the law was to be found in textbooks and the other 96 per cent in the heads and practices of sheriffs, magistrates, justices of the peace, and patrolmen.

It strikes me as significant that the men whose names are remembered for the foundation of graduate schools and university centers of research are also the men who began the extramural work of the universities in this country: Gilman of Johns Hopkins, Harper of Chicago, Van Hise of Wisconsin, and Vincent of Minnesota. The successors to these men are again appraising the university's responsibilities for off-campus education. In presidential reports they have been making such remarks as this, by President Conant of Harvard: "If knowledge is to be advanced in a democracy, the leaders of opinion and the intelligent voters must be kept in touch with what scholarship and research really signify. In a sense, this is an aspect of adult education; viewed from another angle it is but the rendering of account to the country at large of the trusteeship of those who man our universities."

The Background of University Extension

ITS ANTECEDENTS IN ENGLAND AND AMERICA

THE emergency measures of 1940 imposed many new public responsibilities on the colleges and universities. If university extension and the newer forms of adult education are to have a permanent place in the modern American university, the whole matter requires the constant interest of university faculties and of their administrative officers. Otherwise, it may be an irrelevant activity, merely a department of public relations, a recruiting station for enrollments and revenues, or a drab business unworthy of its associations.

University extension, unlike most other forms of adult education, is directly related to the accredited, traditional functions of higher education. Whether it aids or damages the university will be determined by the neatness and good judgment with which the several functions of the university or college are adjusted to one another; professional, graduate and undergraduate teaching, research, and, finally, extension. These are not always congenial elements. They are to be reconciled by something better than the uniform application of arbitrary "university standards."

Extension teaching has lacked prestige in the academic com-

munity. Academic advancement is to be earned more readily by research, by publication, and by campus teaching than by teaching at night, by patient work with students at a distance, or by bringing together professional, trade, labor, or social groups for some kind of consistent study. Critics from outside, none more sharply or more devastatingly than Abraham Flexner in his book on *Universities: American, English, German,* have deprecated extension as a university function and have urged that it be discontinued. Even men who have devoted their best years and energies to the work of university extension have been known to say, in private conversation, that it is time for the universities to make their extension divisions full-powered or to abandon them.

Extension in England

A new principle of academic responsibility toward the community at large is involved in university extension. In England, university extension has been more rigidly and narrowly defined than in America. It has had a longer history there and its social importance has been confirmed again and again by the judgment of academic and lay commissions. But even in England university extension is still too generally regarded as a side show or mere appendage of the university.

A Royal Commission on Oxford and Cambridge Universities, reporting to Parliament in 1922, said that, in their opinion, the time had come for the Universities to take a new view of the relative importance of their extra-mural work: "It was probably inevitable that, at the start, extra-mural lectures and classes should be regarded as an abnormal extension of University services; but the future success of extra-mural instruction de-

pends, in our opinion, on its definite acceptance in all Universities as an established and essential part of the *normal work* of a university."

Such high pronouncements do not necessarily work a change. The University Grants Committee, addressing the Lord Commissioners of his Majesty's Treasury in 1935, returned to the theme:

It seems that the demand for Adult Education in the widest sense is likely to grow rather than to diminish, since the two chief motives underlying it grow stronger rather than weaker. The first of these is the desire for self-realisation and the consciousness of powers unused or undeveloped. This is a part of the general democratic demand for a share in the good things of life, coupled with a sense that knowledge is a privilege which should no longer be the monopoly of "the educated classes." It is indeed a new form of the old demand for "the rights of man," and particularly for the right to the pursuit of happiness, and it comes from those whose conception of happiness includes the unimpeded exercise of their intellectual powers. With the growth of leisure through the shortening of the hours of labour, this demand will probably become more insistent, since a man's power to lead a satisfactory life is likely to depend in larger measure on his ability to put his leisure to good uses. The other chief motive which leads adults to seek education is the eager desire for social progress. They feel that they cannot discharge intelligently their responsibility as citizens without acquiring some understanding of the social order in which they live, of the causes which have made it what it is, and of those which are tending to make it other than it now is. This motive too is unlikely to grow weaker.

The Universities [of Great Britain] have played an honourable part in this movement, in which they have co-operated happily with other bodies, and notably with the Workers' Educational Association. It is true that some critics have doubted whether the duty is one which Universities ought to undertake. There is the danger of popularisation in the bad sense of the word, of seeming to offer education "without tears,"

of encouraging people to expect that they can have education of a University quality cheaply and without a genuine intellectual discipline. It has been feared that in such work there may be a threat to the intellectual standards and even to the intellectual integrity proper to a University. Now it is undoubtedly the special function of the Universities and of their representatives on Joint Committees to be jealous guardians of University standards. This task they have on the whole performed with great success, partly by supplying from their own ranks a large number of the tutors and teachers, and partly by investigating and guaranteeing the academic quality of the rest. Moreover, the students in tutorial classes commonly make up for inferiority in strictly intellectual preparation and in formal education by maturity of experience. Further, . . . it is noteworthy that the extra-mural tutorial class at its best is a peculiarly successful example of intellectual team-work. There is a sincerity and an actuality about the discussion at such classes from which, not only the class members, but those professors and lecturers who act as tutors, have a good deal to learn which they could hardly acquire otherwise. In a word, it is now generally recognised that work in the domain of Adult Education is an integral part of the normal activity of the Universities, with a legitimate claim on their interest and financial support, and we look forward to its steady development.

The Genealogy of University Extension

The history of University Extension, with a survey of its antecedents, could be put in the terms of a family history. It originated in England and seems to have had its first American settlement somewhere between Philadelphia and Baltimore.

Certain lines of the ancestry are to be traced back at least to the eighteenth century in England. Then newspapers began to be published and school was held on the one day of the week when plain people had time for reading and for study. The encyclopedias, study circles, mechanics' schools, libraries, and free political gatherings of that century, sturdy but not always distin-

guished, were the issue of a new spirit in English life. The old, stately, cumbersome, and pedantic kind of literature gave way, we are told, and was replaced through the nineteenth century by a new, more facile, popular, and familiar way of writing which has since prevailed. By the time the name University Extension became generally known, many of the newcomers, of which it was one, had good connections; University Extension had relations, formally approved, at Cambridge and at Oxford. And finally it can be said that from that one line have sprung others of distinction in England, since several of the provincial universities trace their origin to centers where Cambridge and Oxford commenced extension teaching.

The American branch, settled first about Philadelphia, has been prolific. It has been so changed by union with other, native strains that the cousinship between the English and American branches is scarcely distinguishable in the features of the two. Particularly different in appearance and character is the sturdy and long dominant branch of the family which moved westward early and settled at Chautauqua, New York, and thence spread farther westward to Chicago and Wisconsin and so through the West and South.

After 1800: The Mechanics' Institutes

In both England and America, mechanics' institutes, public lecture courses, and lyceums flourished during the early eighteen-hundreds. At Birmingham as early as 1789, members of a Sunday Society organized regular courses of lectures on mechanics for factory workers, and presently put together an artisan's library of reference materials needed for serious study. About 1800, George Birkbeck, a physician of Glasgow and a teacher in the

Anderson Institution, spent some time in a machine shop, supervising the manufacture of pumps and other apparatus for use in his classes. The men of the shop were interested in what he was doing and were curious to know more about the use of the instruments on which they were working. So he invited a few of them to attend one of his regular classes and later organized a "mechanics class" for his shop friends. The numbers grew until he was lecturing to five hundred workmen. When he removed to London, he formed similar classes there, and out of these grew, in 1823, the London Mechanics Institution or Birkbeck College.

The spread of mechanics' institutes was rapid in that time when industrial life was changing. It was no less rapid in America than in England. Here the mechanics' institutes, of which several have survived more than a century, were sometimes called Franklin Institutes; others took the names of their founders, John Lowell, Jr., of Fall River and Boston, George Peabody of Baltimore, Peter Cooper of New York. Like Benjamin Franklin, the founders of these institutions were successful, practical, sensible men who foresaw the need for a kind of education which the colleges and academies of the time could not provide.

Lectures and lecture courses became in those days an exceedingly popular means of adult education. Franklin in his *Autobiography* tells how he prepared demonstration apparatus and the texts of two lectures on the wonders of electricity for a very popular lecturer of pre-Revolutionary Philadelphia. Benjamin Silliman, Yale's first professor of science, began to give public lectures on chemistry and geology in 1808 and kept it up for almost half a century, becoming a much sought after lecturer whose engagements took him to every large city of the East, for good, substantial fees. Professor Silliman's public lectures were

his own venture, but he was everywhere conscious of the fact that he represented Yale College. For lecturers on technical subjects, the mercantile libraries, the historical societies, and the literary and philosophical societies were competing in the eighteen-thirties and forties. Science was then the most popular subject; but temperance, slavery, and reform in general also were popular.

1826–1839: The American Lyceum

The great days of American lecturing were coming. Josiah Holbrook's lyceum circuits, begun in 1826, were at first limited to the small towns of Massachusetts. It was Mr. Holbrook's intention, however, to extend their range until the lyceum should reach every person in every town in the nation. He first thought of his plan as one to stimulate the formation of local associations for mutual education wherein each member would be at times the teacher of whatever subject he knew best, and at other times the listener; but there were more listeners than expert teachers in the small towns and Mr. Holbrook had soon to turn his organization into a bureau for the management of traveling lecturers.

There were many other organizations formed for the popular dissemination or diffusion of knowledge in the first half of the last century. That was a time of Utopian planning. The Boston Society for the Diffusion of Knowledge was a typical example of the societies for popular education that were formed everywhere. This was one organized in 1830 "to promote and direct popular education by lectures and otherwise." The societies were active publishers of books and tracts. They were city societies, while Holbrook's lyceum was for the country towns.

Teachers and educators were drawn to the lyceums as workmen from the factories were drawn to the mechanics' institutes. For a short time it seemed that Holbrook might realize his ambition to have county, state, and national associations. The Teachers of New York State, at Utica in 1831, issued a call for a first national convention of the American Lyceum to meet in New York City in May, 1831. For nine years, national conventions were held and then, in 1839, the national association faded out, leaving its work to local lyceums and being succeeded by such forums and lecture departments as those of the Lowell Institute of Boston, the Peabody Institute of Baltimore, the Brooklyn Institute, and Cooper Union. To suggest the influence of these forums it is almost enough to mention a single event, Abraham Lincoln's Cooper Union address of 1860—delivered in a hall where today, after eighty years, the lecture series of a winter's season have a total attendance of something like 75,000.

1836: The Will of John Lowell, Jr.

John Lowell, Jr., of Boston, died in Bombay in 1836. He had inherited from his father a cotton manufacturing business and a great fortune. His disposition of half the fortune, a quarter of a million dollars, as a foundation for the support of "lectures on natural religion" and "on physics and chemistry with their application to the arts, also on botany, zoology, geology, and mineralogy, connected with their particular utility to man," has influenced the philosophy and character of adult education in Massachusetts for more than a hundred years. A single Trustee, now Abbott Lawrence Lowell, administers the fund, and is required by the will to store away one-tenth of the income each year for addition to the principal. Placards annually announce

the season's biweekly Lowell lectures, six or eight lectures by one man, then six or eight by another, until as many as eight courses of popular lectures have been delivered in each season.

For the more "erudite and particular" courses of instruction, established institutions were commissioned to take special engagements; for instance, free advanced courses were begun in 1865 at the engineering school of Boston, Massachusetts Institute of Technology, where four hundred men begin each year a two-year course of practical study. Fees are modest—for Mr. Lowell circumspectly decreed that "each lecturer may be allowed by the Trustee, when ever he may deem it expedient to allow, to receive a small sum from each scholar, who can afford it, not exceeding the value of two bushels of wheat for the course of six months; but for the abstruse course only, and not for the popular."

The hand of John Lowell may at times have lain heavily and restrainingly on men impatient to see new experiments in adult education tried by the higher institutions of Cambridge and Boston; his wealth, conserved, and his income, liberally spent, may have kept the more venturesome teachers of a later day from those places where persons are not "neatly dressed, and of an orderly behavior"; but, nonetheless, he provided for a century of work, new in his time and still effective in ours, which dignifies the American tradition in adult education as something of "particular utility to man."

1874: The Chautauqua Movement

"Chautauqua," said Bishop Vincent, "lifts up her voice in favor of liberal education for a larger number of people. . . . Chautauqua would exalt the profession of teaching. . . . She would turn the eyes of all the people—poor and rich, mechanics,

and men of other if not higher degree—toward the high school and the college, urging house-builders, home-owners, housekeepers, farmers, blacksmiths, bankers, millionaires, to prepare themselves by a true culture, whatever niche they fill in life, to be men and women, citizens, parents, members of society, members of the church, candidates for immortal progress. . . . To promote these ends, the Chautauqua Literary and Scientific Circle was organized. By its courses of popular reading, it gives a college outlook to the uncultivated, and exalts the higher learning."

John Heyl Vincent, a Methodist clergyman who later became a bishop of his church, and Louis Miller, a businessman and church worker of Akron, Ohio, started the Chautauqua movement in 1874. They purchased a camp-meeting ground at Fair Point on Chautauqua Lake. Beginning as a two-week summer conference for Sunday school teachers, the annual assembly at Chautauqua quickly developed the greatest variety of educational work. Other conferences were rapidly added to that for Sunday school teachers: a scientific conference, a temperance conference, and a church congress supplemented the Sunday School Assembly of the second year. Soon a great range of secular subjects, political, social, economic, and literary were added to the curriculum. Chautauqua became a folk university. College instructors were called to give courses on college subjects.

The Chautauqua Literary and Scientific Circle, formed in 1878, enrolled at one time as many as 60,000 students for home study and consistent reading. The C.L.S.C. reached towns too small to support a lyceum or a library and at one time had enrollments in as many as 10,000 communities in the United States and Canada. Examinations were given. Diplomas were awarded on a gala assembly day in August to those who completed the

four-year course of the C.L.S.C. A central bureau of publication was needed and the Chautauqua Press was organized; books, bulletins, and a magazine, *The Chautauquan,* were published.

A school for the study of languages was set up in 1879; a School of Theology in 1881. Each summer a teachers' institute was conducted by Dr. J. W. Dickinson, secretary of the Massachusetts State Department of Education. The Chautauqua College of Liberal Arts, directed by Professor William Rainey Harper of Yale, had six hundred students on the grounds in the summer, many of them college graduates, not a few teachers in high schools and academies. Its purpose was to bring advanced students directly under the influence of college teachers, both on the Chautauquan grounds and in home study by correspondence:

> To those who covet educational opportunities of the best kind [but] who cannot leave home to enjoy them . . . the Chautauqua College of Liberal Arts comes—not with courses of reading, but with prescribed studies, just such as are pursued in the best colleges of the country. . . . In the course of time they read Greek and Latin as well, as intelligently, as do other college students. They read as wide a range of collateral ancient classic literature. They study mathematics. . . . They perform more experiments in chemistry than the average resident college student. In physics, they read, observe, think, and make a report. On every part of the college curriculum they pass written examinations, in the presence of eye-witnesses, and they prepare theses; all of which go on file in the [Chautauqua] University Office as proof of patience, fidelity and ability. . . . Upon the faithful student honor and reward are put —in diploma and degree.[1]

With the addition of the College of Liberal Arts, the Chautauqua Institution had become a university, chartered by the State of New York in 1883, and authorized to confer academic

[1] John Heyl Vincent, *The Chautauqua Movement,* Chautauqua Press, 1886.

degrees. Not many degrees were conferred—seventeen diplomas of Bachelor of Divinity, three other bachelor's degrees and one doctorate; but Chautauqua had the university's right to give degrees.

To so bewildering a profusion of popular educational activities, unmistakably American, was added the English system of University Extension as it had developed at Cambridge and Oxford Universities. Mr. Vincent had visited England twice, and each time had been impressed by the new English experiment. *A Prospectus of Chautauqua University Extension* was finally issued in 1889 and the Chancellor of Chautauqua appointed a committee of his faculty to promote and administer extension work of a kind that had been successfully developed by the Universities in England.

The Beginnings of University Extension in England

The phrase "university extension" originated in England. There it has been applied to a narrowly limited range of activities: University Extension Lecture Courses, drawing large audiences, people of the middle class; and University Tutorial Classes, definitely related to the needs of working people. At the time university extension was transplanted to the United States, only the first of these two conventional English systems had been developed.

William Sewell, fellow of Exeter College, had recommended as early as 1850 that the Universities of England, with the aid of town and local societies, offer instruction to all classes of society. Lord Arthur Harvey, in 1855, urged that the Universities of Cambridge and Oxford appoint circuit-riding professors so that a literary, a scientific, or a mechanics' society anywhere in

Great Britain or Ireland might contract with a university for a series of six related lectures. A system of examinations was instituted by the Society of Arts in London to encourage more general adult education through the mechanics' institutes, three hundred of which had formed a national union. Out of this experiment in local examinations came, in 1857, a plan of local examinations throughout England for the improvement of schools and teachers. "The first and most important step of all," in the judgment of James Stuart, the originator of the English system of extension lectures, "was taken when Oxford founded the local examinations."

James Stuart, later a Professor at Cambridge and a Member of Parliament, was a Fellow of Cambridge University when, in 1867, he accepted an invitation to give a course of lectures in cities of the north of England and contrived in these public lectures certain practices which have been characteristic of extension lecturing in England since his time. He had been asked to give lectures on the art of teaching. He replied that the art could be best demonstrated by showing a piece of it. So he gave a course of eight lectures on astronomy, one of them conveniently prefaced by a meteoric shower. His first lectures were given in Liverpool, Manchester, Sheffield, and Leeds, a weekly engagement in each city through a period of two months. His audiences were mostly women, teachers—though at Crewe he spoke to workmen from the railway shops. He found it helpful to distribute a printed syllabus before each lecture; he passed out also a set of questions on each topic so that those who were most seriously interested might write reports and mail them to him for criticism and correction. At the end of a course of lectures, an examination was set. So syllabi, lecture quizzes, and course

examinations became standard features of extension teaching by the Universities of England in the seventies.

Mr. Stuart proposed in 1871 that Cambridge University officially sponsor such lectures as he had been giving, and also that the University select local centers where instruction would be given regularly under its direction. An investigating committee was appointed and in 1873 the proposal was approved; then, in 1878, Oxford University also appointed a delegacy to conduct courses of lectures at a distance from the University. By 1890, extension centers had been established in 250 communities and more than 40,000 people were in attendance at local lectures. The two universities were then employing twenty-four extension lecturers, and the London Society for the Extension of University Teaching had a staff of thirty lecturers, some of whom were also on the Cambridge and Oxford lists. The movement grew. In the early nineties as many as 60,000 people were attending extension lectures conducted by the several universities; 15,000 were writing reports and 5,000 stood for examinations.

As a good general description of the English system of the nineties, Professor Adams of Johns Hopkins University chose for quotation in America this statement by a Northumberland miner who had attended lectures through several terms:

> Any town or village which is prepared to provide an audience, and pay the necessary fees [Oxford University charged a class fee of the equivalent of $325 for a full series] can secure a course of twelve lectures on any subject taught in the University, by a lecturer who has been educated at the University, and who is especially fitted for lecturing work. A syllabus of the course is printed and put into the hands of the students. This syllabus is a great help to persons not accustomed to note-taking. Questions are given on each lecture, and written answers can be sent in by anyone, irrespective of age or sex. All the lectures, except

the first, are preceded by a class, which lasts about an hour. In this class, the students and the lecturer talk over the previous lecture. The written answers are returned with such corrections as the lecturer deems necessary. At the end of the course an examination is held and certificates are awarded to the successful candidates. These lectures are called University Extension lectures. They impart, so far as each subject is treated, a university education.

In its beginnings, University Extension was as simple as that. By this modest means, with the least possible interruption of the traditional peace of the Universities themselves, university study was made available to people who previously had had no direct access to the Universities; of course, to people of the middle class, and also to a gifted, intellectually ambitious minority of the working-class people of England for whom, until then, the Universities had been in a world removed. Credit toward university degrees was to be had. The extension student who could show that he had attended six units of lectures in one field—natural science, literature, or history—and two units in another, might come up for examinations in mathematics, Latin, and a foreign language, and be admitted to the University with advanced standing. He could then qualify for the A.B. in two years of resident, university study. It is interesting to see how early in the history of extension teaching appeared the troublesome matter of formal academic credits.

An Appraisal of the English System after Thirty Years

In 1908 a joint committee of university officers and labor representatives published a report on *Oxford and Working Class Education*. Up to that time extension teaching had been only through lecture courses following closely the original Cam-

bridge plan; the Oxford Committee's report now led to the adoption of University Tutorial Classes, more exactly suited, it was thought, to the needs of workmen.

Between 1885 and 1908, said the Committee, 32,146 extension lectures had been arranged by the Oxford Delegacy alone, in some 577 centers, for 424,500 students. What had been the accomplishment? Extension teaching had stimulated a public interest in higher education; there was hardly a town where it had not played a part in educational development; it had sometimes elicited hidden talent, giving encouragement and guidance to isolated students, a few of whom had prepared themselves to enter one of the Universities; it had done something, the committee thought, to counteract a tendency to narrow and utilitarian views in adult training. "Above all, by arousing local interest in intellectual matters, it has helped to lead to the establishment of Universities or Colleges, as at Sheffield and Nottingham in connection with Cambridge, whilst Colleges at Exeter and Colchester have been a direct creation of Cambridge University Extension and that at Reading of Oxford University Extension." Of the social significance of university extension in England, over a period of forty years, there can scarcely be a more striking piece of evidence than this: that colleges and universities were themselves derived from it.

1887: The Beginnings of University Extension in America

Transplanted to America, university extension had a quick growth in the eighties and nineties. Neither of the standard English types, however, has been successfully maintained for any length of time here. The later form, the tutorial class, has scarcely been attempted.

It is generally agreed that the English system of extension lectures, with all of its paraphernalia of syllabi, quizzes, and examinations, was first vigorously advocated in this country by Herbert B. Adams, Professor of History in Johns Hopkins University, speaking at the annual meeting of the American Library Association held at Thousand Islands in 1887. The plan was adopted promptly in several city libraries, notably at Buffalo, Chicago, and St. Louis. Almost immediately, the following winter, a course of lectures on economics was given for the public library of Buffalo. The librarian of Columbia University, Melvil Dewey, urged the extension plan before the Regents of the University of the State of New York, whose secretary he shortly became, inducing the Regents to establish an extension office as one of the five divisions of a state system under their direction and to obtain from the Legislature an appropriation of $10,000 for the support of the new work.

At Professor Adams's own university, Johns Hopkins, systematic public lectures had been given from the very beginning in 1876. The lectures had a special place in the plan of President Gilman: by inviting eminent scholars from other colleges, "the instructions of a small faculty were to be supplemented by courses which should be profitable to the enrolled students, and entertaining, if not serviceable, to the educated public." As many as twenty lectures were given in a single course for which syllabi and reading lists were provided. Courses also were planned for art students, teachers, lawyers, physicians, clergymen, bankers, and businessmen. A Workingman's Institute was organized by the University in a near-by industrial town, Canton, and President Gilman, at that Institute's opening meeting in 1879, told how the University meant to maintain there a reading room and circulating library, to offer organized courses of

lectures, and to conduct evening classes on practical, vocational subjects. Although the term "university extension" was not yet applied to any of this, there was included, nonetheless, the kind of work that Professor Adams of Johns Hopkins described to the librarians at Thousand Islands.

It seemed for a short time that university extension as it had been developed in England, the original, uncontaminated article, would have an even greater public in America. Popular societies were formed. The Philadelphia Society for the Extension of University Teaching, organized in 1890, sent its secretary, George Henderson, to England to make a careful study of extension on the home ground; when he returned, the Philadelphia society changed its name, becoming the American Society for Extension Lecturing. In one winter, 1890–91, twenty-three centers of extension teaching were established. The Society recruited members throughout the country, at annual dues of five dollars, appointed a national advisory committee of prominent educators, proposed to collect information on experimental undertakings everywhere, and to publish a journal in the interests of the whole undertaking. A national convention was held in Philadelphia in 1891. By that time some kind of extension work had been begun in twenty-eight states and territories.

It seemed a simple thing to put the English plan into operation in the United States immediately.

1888: A Prospectus of Chautauqua University Extension

The Americanization of university extension occurred at Chautauqua. Surrounded there by lyceum and university lectures, classes in college subjects, teachers' institutes, *conver-*

sazioni and seminars, directed home reading and correspondence courses, concerts, exhibitions and entertainments, university extension lost its formal, foreign habits and acquired new associations from which it has not since parted.

A *Prospectus of Chautauqua University Extension,* announcing courses to begin in the fall of 1889, had been drafted by Professor Adams. It described a work of education to be conducted strictly on the English plan: connected, progressive lectures (six, eight, or twelve in number), on one subject, by one lecturer; . . . a class exercise or quiz following each lecture; . . . a printed syllabus; . . . printed questions . . . for each lecture, which may be answered by the students in writing at home; . . . a reference library; . . . an examination. The objects proposed by Professor Adams were these: "first, a revival in the United States of the original theme of a university as a voluntary association of students and itinerant lecturers for higher education by means of systematic courses of local lectures; second, promotion of good citizenship by the popular study of social science, economics, history, literature, political ethics, and the science of government, in continuous and progressive courses under the guidance of competent instructors; third, courses of instructive lectures upon natural science; fourth, cooperation with American colleges and other institutions of learning in order to supplement their work by university extension courses; fifth, affiliation with public libraries, mechanics' institutes, lyceums, labor unions, guilds, Young Men's Christian Associations, Chautauqua literary and scientific circles; sixth, the higher education of the American people by the organization of the most intelligent and progressive forces.[2]

[2] Herbert B. Adams, "University Extension and Its Leaders," *Review of Reviews,* July, 1891.

The names of the men who were appointed, as a committee of four, to take charge of the promotion and administration of university extension at Chautauqua, themselves suggest how and where the influence of Chautauqua was to reach the universities: William Rainey Harper, Principal of the Chautauqua College of Liberal Arts, became the first president of the University of Chicago; Frederick Starr, Chautauqua's registrar and Professor of Geology, went to the University of Chicago as Professor of Anthropology; George E. Vincent, Vice Principal of Chautauqua and manager of the Chautauqua Press, also joined Dr. Harper's Chicago faculty in sociology; Richard T. Ely, the fourth member of the committee, was Professor of Political Economy at the University of Wisconsin for more than thirty years, from 1892 to 1925, when one of the distinctive features of the government of that state was its relationship to the state university.

For a time thereafter, leadership in adult education in the United States was taken, first, by the new University of Chicago and then, after 1906, by the University of Wisconsin. If one were thoroughly acquainted with the experience of those two universities, he would know almost the whole story of university extension in this country.

DEVELOPMENT OF EXTENSION UNDER UNIVERSITY MANAGEMENT

1892: University Extension in the Chicago Plan

It is now fifty years since President Harper drew up for the University of Chicago a "unique and comprehensive plan" by which he hoped to "revolutionize University study in this country." The central idea of his comprehensive plan was one of community service.

Dr. Harper had had a long and successful experience in the

management of summer schools and in instruction by correspondence. At the Baptist Union Theological Seminary of Chicago, while he was there as an instructor, he was allowed to open the buildings in the summer for a school of Hebrew. The school, begun in 1881, was a lively success. In a few years that one school had increased to five. But there were also students, many of them ministers of the Gospel, who could not afford either to give up a summer for study or to pay what it cost for travel and for residence away from home. Believing that he could teach Hebrew by correspondence, he wrote out a series of lessons and advertised them in a circular letter to ministers and students of biblical literature. This too proved to be a thriving enterprise and it soon crowded him out of his home library. He engaged a small staff of assistants and organized a joint stock company. Thereafter, wherever he went—to Chautauqua in 1883, to New Haven in 1886, to Chicago again in 1892—he carried with him an educational establishment of his own and a publishing business. While Professor of Semitic Languages at Yale University, he employed for these private enterprises five or six correspondence instructors, three secretaries, two or three clerks, and a business manager.

Dr. Harper was engaged in 1883 to head the summer schools of Chautauqua and to establish there one of his schools of Hebrew. Bishop Vincent had been sometimes troubled by the thought that a Baptist assembly, near-by on Lake Chautauqua, might become a serious rival in the hands of an alert and ingenious man. He was therefore on the lookout for menacing young Baptists. The instructor in Hebrew in the Baptist Seminary of Chicago was just such a man. The Bishop, being in St. Louis, sent off a telegram to Dr. Harper; the two men met at a

way station along the line and, sitting on a baggage truck, agreed upon the terms of a contract which would give Dr. Harper's services to Chautauqua for at least five years. He remained on the Chautauqua staff for fourteen years.

Chautauqua at once felt the effect of his leadership: "His teaching of Hebrew drew numbers of ministers and advanced students. He strengthened all the schools. He had already begun to extend his interest from Semitic linguistics to Biblical literature. He developed the power to hold large audiences with his addresses on such themes as the minor prophets. He met college and university men from home and abroad, came to know distinguished persons in public life, had his faith in summer study and adult education deepened."[8]

How Chautauqua Influenced Chicago

Some of the sources of Dr. Harper's plan of organization for the University of Chicago are to be found in the educational program which he had helped to form and direct at Chautauqua.

To be sure, he drew men and ideas from other universities. From Clark University he took so many members of the faculty as to make what seemed a western migration of scholars, teachers, research workers, and docents. Twelve of sixteen members of Clark's department of biology joined the Chicago faculty. "Most of our faculty were simply transplanted to a richer financial soil," said President Hall. With such men was transferred to Chicago an ideal relatively new in American higher education, the German ideal of graduate study and research which had inspired the foundation of both Clark University and Johns

[8] George E. Vincent: Address at the Dedication of the Harper Memorial Museum.

Hopkins. Clark was purely a graduate institution, a seminary for scholars. It had no undergraduate college, required no dormitories, enforced no discipline of students, and held no commencement exercises. Its staff did no undergraduate teaching. On this point Dr. Hall was explicit: "We are not an undergraduate department in which most graduate students attend and most professors conduct undergraduate work. . . . We are a school for professors."[4] The Clark Bulletin of 1901 said that the University by that time had prepared 386 young men for their vocations in teaching and scholarly research and that these were "now mostly professors or instructors in colleges and normal schools."

Not the least difficult of President Harper's tasks was to reconcile the ideals of the graduate school with the ideals of popular education and community service which Chautauqua represented.

The elements of Dr. Harper's five-division plan which made the project unique and comprehensive were derived more directly from Chautauqua than from other sources:

(1) His phrase for the first division, *the University Proper,* was part of the familiar Chautauqua vocabulary. By that phrase, Bishop Vincent designated the more conventionally academic parts of the Chautauqua program, particularly the College of Liberal Arts and the School of Theology.

(2) In Dr. Harper's university scheme, there was a division line between *the University Proper* and *the University Libraries, Laboratories, and Museum.* That line may have helped to emphasize a distinction between general education for the beginning college student and the specialization, premature or undesirable, in which he might be en-

[4] G. Stanley Hall, *Life and Confessions of a Psychologist.* Quoted by W. Carson Ryan, *op. cit.*

meshed. Specialization before the third college year was to be discouraged at Chicago and survey courses were to take the place of laboratory exercises through the first two years of college work. Here again one is reminded of the Chautauqua prospectus in which "courses of instructive lectures upon natural science" were proposed.

(3) As at Chautauqua, there were to be "affiliations" with outside institutions, learned associations being linked to the university by a *Division of University Affiliates.*

(4) For the publication of learned and popular books and journals, Dr. Harper insisted, against the reluctance of his trustees, that there must be a *University Press.* The publication of texts and journals had been a major enterprise of Chautauqua and of Dr. Harper himself, before he joined the Chautauqua faculty.

(5) And, finally, a *Division of University Extension,* on a par with other divisions, would give opportunity for study to any whom "social or economic reasons" prevented from entering the University Proper.

For the first time in America, university extension appeared among the formal divisions of a university plan. But the University of Chicago was by no means alone in announcing extension lecture courses. George E. Vincent in his monograph on *Summer Schools and University Extension* says that at about this time colleges and universities "vied with each other in the rapidity with which they issued circulars announcing lists of lectures, and proposing the organization of centers." Many universities and colleges were represented at the national convention called in 1891 by the American Society for Extension Lecturing. Courses announced by the state universities and other universities at that time followed closely the conventions of English extension teaching (consecutive lectures, printed syllabi, etc.).

The Chicago plan of extension teaching was distinctive in three respects: first, it established extension as a formal, per-

manent division of the University; second, the details of a thoroughgoing adjustment to other university work were set forth in what we, in this day, would call an integrated plan; and, third, along with the English type, there appeared at Chicago an extension program such as Chautauqua had had, offering, in the classroom and by mail, *college courses for college credit.* College and university instruction would be available by extension to the public at large. Courses of "college-studies" (with syllabi), conversational classes, exercises and examinations, would be conducted at points distant from the University. Instructors having full standing in the University would teach standard courses in university subjects downtown in Chicago, and at other centers. Teachers, similarly appointed, would give instruction by correspondence. The University would set examinations to accredit the work of off-campus students.

This pattern of university extension was new. It differed fundamentally from the original English type of extension by the inclusion of standard university and college courses lifted bodily from the regular curricula, credit and all.

The Matter of Credits

Of all the innovations by which the character of university extension was modified at the University of Chicago, surely none has been of greater consequence than the attachment to extension studies of the regular units of credit, the same units of credit that were to be given for work done within the University Proper.

Extension and correspondence students were regularly matriculated members of the university. Half of the work for the bachelor's degree, a third of that for the doctorate could be taken by correspondence. Since credit for advancement and for

degrees could be earned in extension, unit by unit, the courses given in extension classes or by mail must duplicate the work of campus students, presenting the same body of knowledge in a controlled sequence of courses, under prescribed rules and regulations.

In the emphasis placed on ranking and grading of students in all parts of the university, President Harper's intentions seem to have been specific and absolute. *Majors* required so many hours of classroom work, *minors* so many; term grades, based on periodic examinations, determined inescapably the standing of all students, whether full time was given to study or only part time.

Since that day, the debate over credits has continued—as to their validity, whether credits in extension earned in one college or university are acceptable in another, whether college units of credit are applicable at all to adult students, and if the insistence on credits for hours and on credits for points does not effectually prevent true general education of adults. The extension divisions of American universities, in the opinion of W. S. Bittner, the Secretary of the National University Extension Association, may "now believe in non-credit courses and sometimes wish they need not give any other kind, but in the present system, which is permeated by the course-credit-complex, nothing short of a revolution can release college students and adults from the stifling attitude that a college education must be obtained by passing through a series of credit courses in so-called regular fashion."

Some Social Implications

The study of the theory and practice of academic credits is, like the study of taxation, a dull business in which none but a

fanatic can have any pleasure. Yet I suspect that if one wishes to understand and be wise in matters of government and of education, he must begin by understanding the principles of taxation in government and the system of credits in education. It is fortunate here that the study of the subject requires the study of so engaging and vivid a character as that of Dr. Harper.

Because of him a great national experiment in adult education in the nineties came to have a lasting social significance. The influence of that experiment upon the University of Chicago, and so upon the whole system of higher education in this country, is an historic confirmation of the claim that a popular movement in education is bound to have a permanent effect upon formal education. The moment of most severe test is that at which the informal system is fitted, as it was at Chicago, to the established, formal system.

Neither Gilman at Johns Hopkins nor Hall at Clark University gave any such absolute value to grading and ranking, to units of credits, and to requirements as to hours of study as did Dr. Harper at Chicago. He was obliged to have some uniform measure, applicable everywhere in the University. Possibly he was subtly influenced also by a desire to show the academic world that Chautauqua classes, summer schools, and correspondence studies could be measured by the strictest academic standards and not fail. He had been out with what Professor Adams called the Salvation Army of the educational forces and he knew that university faculties were "suspicious of the whole matter." Their suspicions must be quieted. What was done at Chicago must be of university grade, above suspicion, intellectual, academic, not vocational.

Some of that skepticism with which Chautauqua was regarded

must have been turned on the University of Chicago when the summer school became a fully accredited fourth quarter and all the miscellaneous undertakings of Chautauqua, including home study, were taken into the University as the equals of traditional forms. Superficiality, depreciation of the values of education, "education without tears"! Bad money drives out good: Gresham's Law had its parallel, perhaps, in education. There was also the practical danger that regular enrollments would shrink if too many opportunities for irregular, part-time study were offered.

Contending against his critics, possibly long before his elevation to the presidency of a new and well-endowed university, Dr. Harper may have put more emphasis on absolute standards of performance than would have been necessary for President Gilman to give to the same subject at Johns Hopkins.

1900: The Collapse of "University Extension"

Judged by the enthusiastic expectations of the time of the founding of the University of Chicago, university extension was a distinct disappointment everywhere after ten years had passed. The Chicago Society for the Extension of University Teaching was absorbed into the Extension Division of the University, and presumably would be perpetuated there even if public interest fell. But the American Society for Extension Lecturing was disappointed in its hopes that great numbers of people would complete the courses. In 1899–1900, the Society's lectures were attended by 22,794 people, but only 381 papers were written and only 29 qualified for certificates. Chautauqua itself dropped its title of university, surrendered its right to award degrees, gave up most of its correspondence work, and resigned extension lecturing to the universities. Gradually, the wave of public interest

in adult education subsided. One by one the lay institutions withdrew. "By 1895," said George E. Vincent, "many of the universities had abandoned the work entirely or continued it in a feeble fashion only."

President Harper himself, engaged in building up his university, seems to have lost his earlier confidence in extension work. It is surely a revealing fact that university extension, his one-time favorite, was slighted in his last testament as an educator, a series of essays on *The Trend in Higher Education.* In the biography of *William Rainey Harper: First President of the University of Chicago* by a close friend, Professor T. W. Goodspeed, the whole matter of extension teaching is passed without a single reference in the index, and correspondence study is named only in the early chapters.

"Fifteen Lean Years"

Several explanations have been given for "the fifteen lean years" between the success of the early nineties and that which followed the restoration of university extension at the University of Wisconsin in 1906. Professor Adams, the original interpreter of the English system of university extension, gave Dr. Vincent five reasons for the decline in interest[5]: first, lack of suitable extension lecturers; second, lack of financial support; third, inability of university men to carry the extra burden of travel and teaching; fourth, the greater claims of academic service on college campuses, where enrollments were just then rapidly increasing; fifth, the development of less expensive ways of popular education. Alfred L. Hall-Quest in *The University Afield* attributed the long depression in university extension to

[5] George E. Vincent, *Summer Schools and University Extension.*

the insistence of the universities that adult students "adapt themselves to university standards."

In the words of Richard R. Price, Director of University Extension at the University of Minnesota, "The first flash of enthusiasm was followed by some fifteen years of retrogression Between 1891 and 1906 most of the activity in this line had ceased. It is probable that many of these efforts were in the experimental stage and were undertaken without adequate financial provision and without thorough knowledge of the conditions or understanding of the real meaning of the movement. The universities also contributed to the unfavorable issue by inflexibility of their organization and by their unwillingness to adapt their methods to the needs and previous training of these adult students."

It could also be suggested that for a time, while college enrollments were phenomenally increasing, there was less need for evening and off-campus education.

No doubt all these causes contributed to the decline of university extension. But flexibility and adaptability are not yet the most common characteristics of colleges and universities; new courses and experiments in extension are not yet underwritten; innovations are still expected to pay for themselves within "a reasonably short time"; courses of a later day have won handsome enrollments though they are commonly advertised now as "identical with" or "equivalent to" courses given on the campus. It is worth while to look quite closely at the success in university extension which followed the revival of the whole theme at the University of Wisconsin after 1906, contrasting the new system with the old to identify causes of success.

Since 1906: University Extension at Wisconsin

The original director of University Extension at Chicago was Professor R. G. Moulton, "a veritable apostle of English university extension in these United States," an experienced extension lecturer from Cambridge, England. He came here under the Redpath Management to deliver popular lectures on ancient and modern literature, on Shakespeare, Milton, Goethe's *Faust*, Euripides for English Speaking Audiences, and Stories as Modes of Thinking. In England, the subjects of extension teaching were history, literature, appreciation of art and music, economics, philosophy, psychology, and one or two branches of natural science. These academic fields still comprise the area of English university extension lectures. The voluntary societies in Philadelphia and Chicago, the Chautauqua College of Liberal Arts and the C.L.S.C., and finally, the Extension Division of the University of Chicago offered to greater numbers of people than could come to the universities a share in the cultural heritage. They did not touch the vocational; or if they did, then it was only in an academic way.

In the program of education originally offered by extension from the universities there was not much to satisfy the professional man's requirement for continuing professional study. Except for teachers, the studies encouraged by university extension in the nineties could not be of direct professional or vocational value. When university extension was revived at Wisconsin there was a distinct shift of emphasis.

"Right or wrong," said Dean Reber of Wisconsin, "you find here a type of University Extension that does not disdain the simplest forms of service. Literally carrying the University to the homes of the people, it attempts to give them what they need

—be it the last word in expert advice; courses of study carrying university credit; or easy lessons in cooking and sewing. University Extension in Wisconsin endeavors to interpret the phraseology of the expert and offers the benefits of research to the household and the workshop, as well as to municipalities and state."

Examine the map of Wisconsin, said Dean Reber, the lakes and the river that bound it, the commercial, manufacturing, and shipping centers on these natural outlets to the world's markets; observe its small communities and its isolated families in remote and inaccessible places; recall its commingling of races and nationalities; and relate all this to the campus at Madison.

The chief distinction between privately endowed and state universities, in the judgment of President Van Hise, was just this: that the state university has a special obligation toward the state which supports it, while the endowed university need feel no exceptional obligation to its home commonwealth. The state university feels bound to become the scientific adviser of the state, investigating all questions of concern to the people of the state; the diseases of its potatoes, the incidence of tuberculosis among its men and kine, the management of its utilities, the derivation of its laws. The state university's field of investigation covers all the practical problems of the state, agricultural, industrial, political, social, and moral.

The correspondence courses conducted by the University of Wisconsin after 1906 differed from those offered then and later at the University of Chicago chiefly by the inclusion of a large proportion of courses that were intentionally utilitarian.[6]

[6] Charles R. Van Hise, "The University Extension Function in the Modern University," Proceedings of the National University Extension Association, 1915.

Among the first achievements of the Extension Division was the establishment of a State Industrial Education Board. When the University had been relieved by the vocational schools of the necessity for offering industrial courses on an elementary level, it was called upon for more advanced technical courses, both in class and by correspondence. The engineering instructors were the first full-time instructors employed in the Extension Division of the University.

Though today the emphasis at Wisconsin may not be focused on industrial subjects and the present staff for those subjects may not be large enough for as full a program of industrial institutes and short courses as was once maintained there, nonetheless the strong Wisconsin tradition in technical training for industrial work prevails. The technological subjects (not including mathematics, the basic sciences, and economics) account today for more correspondence enrollments than does any other subject. Students in these departments today range from 17 to 63 years of age, the majority being in the late twenties or early thirties. A good quarter of them are college graduates, and nearly three quarters of all the extension students in the technical fields have had more than a year of college or university work.

Because of this background, Wisconsin is in a particularly happy position to conduct general programs of advanced technical and industrial study.

In a report of the President of the University of Wisconsin for 1938, there is a chart of the University's off-campus organization. Under the chart is quoted a comment by Lincoln Steffens: "The University of Wisconsin is as close to the intelligent farmer as his pig pen or his tool house. The University laboratories are a part of the alert manufacturer's plant. To the worker the University

is drawing nearer than the school around the corner and is as much his as his union is his. Creeping into the minds of his children with pure seeds; into the debates of youth with pure facts; into the opinions of voters with impersonal, expert knowledge, the State University is a part of the citizen's own mind."

All this suggests that there was one marked difference between the Chicago and the Wisconsin concepts of university extension. At Chicago, as in England, university extension dealt primarily and almost exclusively with academic or cultural subjects: at Madison there was no such restriction.

An Experiment in Dynamic Sociology

There is a clear and interesting connection between the Wisconsin plan of university extension and the philosophy of the American sociologist, Lester F. Ward. Ward had come to the study of society and social problems by way of the natural sciences. He was a geologist. So was President Van Hise. The philosophy of Ward, preaching "the scientific control of social forces by the collective mind of society," had a strong appeal for Dr. Van Hise.

Ward believed that a system of education, to be worthy of the name, must be framed for the great proletariat. All that is known to men must be made known to all men. All must have an opportunity for learning. So would society rid itself of the burden and danger of its own barbarians and of poverty and crime. "Any system of education," said Ward in the concluding chapter of *Dynamic Sociology,* "which falls short, even in the least particular, of absolute universality, can not proceed from any true conception of what education is for or of what is capable of accomplishment."

President Van Hise's own words disclose the influence of Ward's doctrine in the program of university extension. Summarizing the work of ten years, he said: "The facts presented make it clear that utilizing the opportunity to carry out knowledge to the people will be an advantage rather than a disadvantage to the growth of a university along other lines. But this should not be its purpose. This idea was fully clarified in my mind when Ward's *Applied Sociology* appeared. Ward there proved that the greatest loss which we as a nation suffer is loss of talent. Talent is not the heritage of the rich, but is equally the heritage of the poor."

1915: National University Extension Association

President Van Hise of Wisconsin opened the first session of the National University Extension Association, at Madison in 1915. The new Association had 22 institutional members: Columbia University, Indiana University, Iowa State College, Pennsylvania State College, Harvard University, the State University of Iowa, and the Universities of California, Chicago, Colorado, Idaho, Kansas, Michigan, Minnesota, Missouri, North Carolina, Oklahoma, Pennsylvania, Pittsburgh, South Carolina, South Dakota, Virginia, and Wisconsin. President Van Hise estimated that by that time 30 or more state universities had organized extension divisions under a permanent director or administrative committee and 25 independent agricultural or mechanical colleges were actively engaged in extension work. So rapidly had extension re-established itself. Between 1906 and 1913, 28 universities organized extension divisions and 21 reorganized departments which, during "the fifteen lean years," had been abandoned or neglected.

The pattern of university extension which Dr. Van Hise then

described has not changed greatly in the succeeding twenty-five years, at least not in its superficial characteristics. The section meetings and colloquia of an N.U.E.A. annual session, each devoted to its own perennial departmental problems, still dispose themselves in a printed program according to the major classifications of extension work described by Dr. Van Hise: university extension classes, home study or correspondence, institutes and short courses, library bureaus that circulate packets of books and clippings, a bureau of visual aid (including, now, more moving pictures than stereopticon slides), bureaus for lectures and lately for forums, state-wide contests of all kinds for children of the schools, and miscellaneous services to state officers and social organizations.

Social changes have imposed new duties on the extension departments, but have not greatly modified the traditional forms of their work. Unemployed youngsters, out of school and out of work, and their dispossessed elders have presented new problems. Extension divisions have in many instances contributed plans or services for the educational work of C.C.C. or W.P.A. continuation schools. Sometimes in conflict with adult schools and community councils, in a rivalry which on both sides is frequently bitter and nearly always unwise, the extension and evening colleges have nonetheless adopted many of the new forms of adult education. There has been an increase in the number of noncredit courses and round-table, forum, and panel discussions, which are more characteristic of adult education in the thirties than are the conventional credit courses of the now traditional extension program. Independent, but often closely related, adult education centers and adult colleges of a new type have been set up. The Cleveland College of Western Reserve University, the General Education Division of New York Uni-

versity, and the Adult Education Center of Washington University in St. Louis are typical of these.

In this recent time much has been discovered about the psychology of learning. The extension teacher, like his colleagues in other faculties, has asked not only How do *we* teach? but also, By what mysterious actions of the mind and for the sake of what motives do *they* learn? As new social purposes have been proposed for education, the extension divisions have made their own application of the popular slogans—Education for Leisure; Education for Citizenship; Education for Social Action; Education for Defense of the Democratic Way. The extension divisions have rediscovered their communities, where social problems too great to be handled on a national scale may be solved in the smaller local dimensions.

Lately, new instruments for education have been provided. A new audience, fabulously great, but still elusive and inert, has been made by the radio; an invisible audience for a disembodied Hopkins on an infinite log. Sporadic attempts have been made—in Chicago for a short time, and, with more promise of stability, in the Rocky Mountain area—to consolidate for a region all the separate projects in university education by radio.

Conventional forms persist. Extension is old enough now to have its own traditions and codes and to depart from these only reluctantly. National associations—the National University Extension Association of 52 member universities and the Association of Urban Universities of 41 members—have codified the rules and practices, elevating standards but favoring conformance more than originality. The refreshing and dignifying influence of a new movement in adult education was needed.

Those who know the work of university extension best and have the highest hopes of its use in public education are the

most conscious of risks of inflexibility and immobility. In a paper read at the annual meeting of the American Association for Adult Education in 1940, Professor W. S. Bittner of Indiana University, Secretary of the N.U.E.A., made this comment: "Perhaps I am safe in saying that the thirty or forty years of university extension in the United States have completed a period in the sense that now there is nothing significantly new, no particularly important innovation apparent either in the philosophy or the practice of university extension. It has a traditional pattern showing little evidence of reshaping. There are, of course, some changes. One of them, curiously enough, is presumably a kind of reversion to academic strictness by the adoption of such names as University College or Evening School in place of University Extension and the practice of designating by fiat certain extension centers as 'residence' centers for degree-credit purposes. Such changes are superficial variations of an old pattern."

CURRENT DEFINITIONS OF EXTENSION

University extension, as defined, for instance, by the statutes of Columbia University, is "instruction given by the University and under the administrative supervision and control of the University, for the benefit of students not able to attend the regular course of instruction." Under the terms of this statute, the University has organized its "department of adult education" which in 1940 registered 10,964 students for 18,268 extension course enrollments.

Formal Classes

The statutory definitions of university extension vary, but in general it may be said that colleges and universities have extended to part-time adult students opportunities for learning

not essentially different from the opportunities offered to students in residence. In the extension and evening classes, the equivalence is carefully protected. Reiterating a few standard phrases much the same in all announcements of all extension and evening divisions, the colleges and universities say that their purpose is to make the campus as broad as a state, to carry the teaching work of the university into all parts of a community, providing facilities at a distance for the very kind of education that is offered within the campus itself. Courses in extension are said to be equivalent to those of the regular curricula, equivalent in title, content, and accomplishment, carrying like credits, conducted by the same instructors or by instructors no less carefully selected and no less qualified academically than those who work on the campus. The student who can not afford to go to college, the student whose college studies have been interrupted, or the student who has neglected to obtain and now regrets the lack of an education, may complete his education without giving up his job or leaving his home town. Again and again the phrases occur: "Courses prepared by members of the University faculty coordinate with work in residence and have the same credit value" "Courses conducted by regular members of the faculty, by instructors from other institutions of higher learning, and by experts in business and professional pursuits officially appointed as Extension Lecturers."

Class Enrollments

In the courses for credit at the larger universities astonishingly great numbers of extension students enroll: 7,797 in the University of California, 3,410 in the University System of Georgia, 3,177 in the University of Chicago, 5,797 in Indiana University, 4,341

in Louisiana State University, 6,834 in the University of Minnesota, 3,489 in the University of Oregon, 4,496 in the University of Pennsylvania, 5,268 in the University of Wisconsin. State universities, private universities and colleges, teachers' colleges and normal schools, and junior colleges raise the total for the country to phenomenal figures. Enrollments in evening classes conducted by urban universities are particularly impressive: Eight colleges in the metropolitan New York area recently had 46,812 registrations for evening and extension courses given in university buildings and 6,520 for courses given at a distance from the university; three institutions in Philadelphia had 10,096 enrollments for campus courses; two institutions in Pittsburgh, very evenly matched, had together 7,128 evening students, and one of these had also 812 in classes out of town. The University of Cincinnati had 6,050 on-campus and 621 off-campus students. All this is in courses for which regular academic credit is given.

Statistics, always inconclusive and deceptive, would be particularly misleading if one were to estimate the number of adult students engaged in these extension class studies. I have given up every attempt to make a fair estimate of that number—if for no other reason than that enrollments in extension classes include unidentified numbers of full-time students who for their own purposes elect to attend classes at night.

Young People in Extension Classes

By a process of osmosis, part-time and full-time students move back and forth between regular day classes and evening courses. At the University of Toledo, for instance, where an arbitrary time limit is set for the end of day school and the beginning of night school, the day enrollment of 2,188 included 310 part-time

students, while the evening enrollment for credit courses, totaling 739, included 198 full-time students. A study of attendance at extension classes of eight universities, by Herbert Sorenson, disclosed that in one university 37.5 per cent of the men and 26.4 per cent of the women students were between the ages of fifteen and nineteen; in another institution the corresponding figures were 4 per cent and 6.3 per cent.

Undergraduate Credits for Adult Study

If extension students are to be graduated with extension credits on their records, a real parity between the two kinds of credits should be maintained. Some years ago, at the University of California, faculty criticism of the application of regular undergraduate credits to extension work became so acute that it was actually voted that no extension courses would be accredited for the bachelor's degree. In settlement of the dispute, the faculty senate determined to recognize three kinds of courses: first, those equivalent to campus courses, each designated by an X in the catalogue numbering, these to be accepted for as much as three years' credit in an undergraduate course; second, upgrading courses to suit special needs of teachers, courses not accepted for degrees but satisfactory to the secondary school administrators; and third, courses for which credit of no kind is given.

All these distinctions are indicated plainly in the catalogues of the Extension Division of the University of California. To attain an X in the catalogue listing, a course must be conducted by an instructor approved in advance by the department concerned. He must be a teacher equal in ability and rank to men of the departmental staff in charge of like courses. The course must be similar in content and label to parallel courses given on the

campus. The instruction must conclude with an examination conducted under the rules governing examinations on the campus. A new accredited course must have been approved by the director of extension, by a department of instruction, by the chairman or a representative of the faculty's advisory board on extension courses, and, finally, by the faculty committee on courses, and by the president of the university.

Extension divisions are held strictly to the mark in the matter of credits. Officers of extension do not make the rules nor can they greatly modify them. On the one side, faculties jealously protect the system; on the other, students in extension commonly have insisted that credit be allowed to them. Though a student in an extension class may have no immediate use for units of credit, may not intend ever to stand for a degree, and is taking the course only because of an immediate interest in the subject, even so he thinks that he may one day want the recorded credit or that the university itself has expressed an opinion on the quality of two courses by attaching credit to one and withholding credit from the other.

Centers of Extension Teaching

Approximately 300 courses are offered, for example, by the extension division of Indiana University. They are, for the most part, undergraduate courses in the College of Liberal Arts and Sciences, but among them are also courses of the Schools of Education, Medicine, Business, and Music. The division is willing to send an instructor, weekly or fortnightly, into any Indiana community where a group of twenty or more will organize to study a subject offered as an extension course.

At four places in the state, the University maintains perma-

nent extension centers, at Indianapolis, Fort Wayne, Calumet, and South Bend. If the center is far removed from the main campus, as at Fort Wayne and South Bend, it is always in some danger of academic isolation; those close to sister institutions may borrow the needed instructors, as the Calumet Center borrows instructors from the faculties of the University of Chicago or Northwestern University. The Indianapolis Center of Indiana University is so close to the home campus that instructors are apt to motor down together from Bloomington. Of 70 instructors on the staff of the Indianapolis Center, 45 come from the University (four of them for two evenings each week); about 20 are Indianapolis business and professional men; and half a dozen are members of the permanent staff of the Center. The University instructors are usually the junior men for it is they who need most to supplement their incomes, and their greater vitality is wanted for pupils who go to school after a day's work.

More than 2,300 people attend classes at the Indianapolis Center of Indiana University, and somewhat more than a quarter of them elect subjects in business administration. The leading subjects of a recent year were Business Administration, 618; English, 466; Education, 209; Psychology, 140; Chemistry, 118; Mathematics, 80; Economics, 66; Journalism, 63. Though elsewhere teachers may predominate, at this center, in Indianapolis, clerical and office workers (710) outnumber them (275); the third largest contingent is that of nurses and social workers (127); other large groups are the salesmen (74), engineers and technicians (60), housewives (56), college students (33), librarians (27), newspapermen (12), and laborers (12). This is probably not an untypical distribution for a metropolitan center.

Indiana University provides the building, rent free. Aside

from that capital allowance, the Indianapolis Center need charge to the University, and so to the taxpayers, only a little more than 10 per cent of its annual budget of approximately $70,000.

In Milwaukee, the University of Wisconsin owns a seven-story building, its Milwaukee Center, which stands directly across the street from the block-square Vocational School; together they constitute, though under separate managements, a kind of metropolitan college. From 8 in the morning until 5:30 in the afternoon the University's Center is a junior college where freshman and sophomore courses are taught in letters and science and in engineering; but from 5:45 until 9:30 at night the extension center is a school for part-time students, too, particularly for students of accounting (the largest number in 1940), real estate administration, engineering, liberal arts, insurance, and factory management. As in other departments of Wisconsin's extension work since 1937, the junior college overshadows the classes for adults. The Milwaukee Center of the University of Wisconsin, like the Indiana University Center at Indianapolis, earns a fair share of its cost, somewhat more than 70 per cent of a total budget of a quarter of a million dollars.

University College

"University College," says the University of Southern California, "is a regular residence division of the University planned for the purpose of giving fully and partially employed persons the opportunity for a university education on a part-time basis. The purpose is accomplished through the offering of selected groups of courses in afternoon, evening, and Saturday morning hours. Its curriculum consists of regular University courses organized on the quarter basis. Students have the use of libraries,

laboratories, classrooms, and other extensive facilities of the entire university." Until 1939, a separate, downtown division of the University was maintained, the Metropolitan College. When the University proposed to transfer all evening classes to the main campus, more than three-quarters of the night students voted against the proposal. Nonetheless, the move was made in 1939 without reduction in enrollment. Eighty to 90 per cent of the instructors are members of the faculty who also teach in daytime classes; they receive extra remuneration for one evening class, and those who are scheduled for more than one evening class have a compensating reduction in their regular teaching load.

In Chicago, two university colleges have been established near the business center of the city, far from their home campuses, one by the University of Chicago and the other by Northwestern University. The University of Chicago has rented classrooms and offices in a business building and uses, for large audiences, the assembly hall of the near-by Art Institute. Northwestern University, since 1926, has had a Chicago campus where there are also schools of law, medicine, dentistry, commerce, and journalism, as well as the university college—an evening school of eight divisions: art, social sciences, natural sciences, education, music, speech, social work, and general education. In both university colleges, credit courses predominate. Northwestern's evening program is more frankly vocational than that of the University of Chicago.

The policies governing the organization of the two institutions differ. Both university colleges choose teachers from the regular university faculties, making some supplementary appointments. Teachers from the University of Chicago quadrangles accept downtown assignments as "part of their regular teaching obliga-

tions" and receive no additional compensation, while teachers coming from Evanston to meet classes at Northwestern's University College are allowed special compensation.

So far, there have been mentioned two styles of university college: that on a home campus in Los Angeles; and the downtown colleges of universities located in metropolitan suburban areas. A third variant of the university college is to be found in Rutgers University. There the University College, established in 1935 as a unit distinct from the extension department, consists of two divisions, one on the home campus at New Brunswick and the other at Newark. The Director of Extension is also Dean of University College.

"Study with a Purpose"

In Chicago, "students who do not desire to become candidates for a degree in the University of Chicago and who wish to take a course or courses for transfer purposes, for promotional credit, for professional or cultural ends should qualify for admission as 'students-at-large' and should consult the Dean of University College about their academic program and qualifications for admission." The University College of Rutgers University remarks: "Many adults desire to enroll for individual subjects merely for their vocational or cultural value. Such persons may be admitted to any course upon the presentation of evidence that they are qualified to do the work satisfactorily." Northwestern University makes specific provision for the ultimate academic recognition of a student irregularly prepared—he may be admitted to designated curricula and may be officially transferred to regular standing after a time if he maintains a prescribed, satisfactorily high standing.

Under the heading, "Study with a Purpose," Washington Uni-

versity of St. Louis summarized the opportunities for study in evening classes of a university college, saying in 1937:

1. You may begin or continue work toward the Bachelor of Science in Education, and receive the degree through University College.

2. You may earn a maximum of 60 units of credit toward the Bachelor of Arts degree, and you may apply these units as credits toward this degree in the College of Liberal Arts.

3. You may complete the two years of pre-professional work required for admission to the professional schools of Business and Public Administration, Social Work, Medicine, Dentistry, or Nursing.

4. You may complete the work of the Freshman Year in the Schools of Engineering and Architecture, and you may take other courses that may also be applied as credit in these schools.

5. You may earn 8 units of graduate credit that may be applied toward the degree of Master of Arts in the School of Graduate Studies.

6. You may register for courses arranged in curricular combinations leading to certificates in Accounting, Advertising, Real Estate, Salesmanship, Architectural Engineering, Structural Design, Electrical Engineering, Heat Engineering, Machine Design, or Mechanical Engineering.

7. You may take courses on a high school level enabling you to make up deficiencies in preparatory training.

8. If they can comply with the prerequisites, mature students may take for their own personal profit and satisfaction any of the courses listed in the catalogue.

Of the eight paragraphs just quoted, only one, the last, suggested that mature students may wish to disregard credits and certifications and elect to study for their own "personal profit and satisfaction."

Adult Education Centers

At Washington University, whose periodical *Bulletin of Adult Education* has just been quoted on study-with-a-purpose, there was opened in September of 1939 a new branch of University

College, an Adult Study Center where only informal and noncredit courses are offered. This was not a completely new departure. In the previous year, on the main campus, 10 per cent of the 233 courses offered had been noncredit courses. At the new Adult Study Center in the first year 39 courses, not related to university credit, were offered and 765 persons enrolled for them. The new courses, none carrying credit, included: Photography, with an enrollment of 120 students; Current Issues and Problems, with 100; Practical English and Better Speech, with 62; Public Speaking, with 53; Thimble Thrift, with 33; Conversational English, with 32; Adult Music Education, with 22; and Personal Check-Up, with 21. Dean Bowling observes that "the adults of Greater St. Louis signified that such courses as the following had no great attraction for them: Modern Pioneers in Art, Landmarks in English Drama, Books of the Day, Ancient Analogues of Modern Problems, Taxation for the Layman, Personality Problems in Business, Public Relations and Public Opinion Analysis, Planning, Preparing, and Securing Good Publicity."

A number of university evening schools have set up such informal programs in which the emphasis on credit is minimized, some within the established evening school, as at the University of Cincinnati, some under the management of new divisions, as at New York University, and some in semi-independent schools or centers, as at Washington University, Western Reserve University, and the University of Minnesota.

Cleveland College of Western Reserve University, a school of 6,000 full-time and part-time students, is a degree-granting college for adults in which 10 per cent or more of the students already have college degrees and approximately 20 per cent are special students admitted without complete high school records.

The fundamental idea has been that courses for adults should not merely duplicate those offered on the college campus, but should be adapted in content and teaching method to the needs of adults. The former director of Cleveland College, A. Caswell Ellis, has contended that, as the data of army tests in the first World War showed that only about one-eighth of the men of first-rate ability had ever been to college, it is the duty of adult education to discover and train for responsibility of all kinds the neglected seven-eighths of our potential leaders. His philosophy of education is reminiscent of Ward's "dynamic sociology," to which President Van Hise of Wisconsin referred at the foundation meeting of the National University Extension Association.

Center for Continuation Study

Functionally the Center for Continuation Study at the University of Minnesota and the extension division of the University belong together. They are, in fact, separate and independent. The extension division has its traditional functions. The Center has a new field, being a residential college for adults who enroll for short terms of study.

President Coffman, who proposed and built the Center in 1936, believed that universities should become centers of stimulation within the state for the continuing education of adults who are exercising leadership or are in a position to exercise it. "A few random lectures delivered here and there will not accomplish much," he said. "I think the work that universities do for the education of adults should be done in large part at the institutions themselves. Potentially they [the universities] are the most powerful agencies we possess for promoting adult education on the higher levels."

The Center, erected at a cost of $300,000 with 45 per cent of its cost financed as a Federal Works Project, has residence accommodations for about eighty persons, a lounge, a library, conference and assembly rooms, and dining halls. The building is closed for three weeks in September. Through the rest of the year there runs a constant succession of short courses for professional people. Over a period of three years, 25 per cent of the students were teachers and educators, 19 per cent physicians, 13 per cent hospital administrators, 11 per cent civil service and government officers, 10 per cent business people, 5 per cent engineers and industrial managers. Thirty-three per cent of those attending had advanced degrees and 30 per cent had at least a bachelor's degree; and 83 per cent were over thirty years of age. With a slightly increased enrollment, an average attendance of more than fifty, the Center could probably balance its own budget without outside or university aid. It comes very close to doing so now. All but a small number of the students at the Center come for specific information and training, or re-education, of a professional character, so that the Center relies little upon individual enrollments and greatly on the interest of organized groups having a compelling common interest.

How does the Center operate? The answer given by its director, J. M. Nolte, is this:

> The plan of procedure is simple. The Center performs most of its work by holding short courses in highly specialized subjects for carefully selected professional or vocational groups. Men engaged in structural engineering, for example, may feel that recent developments in their profession have left them unable to compete on equal terms with youngsters just graduating from college, or that changes in materials or processes have made it necessary for them to devote special study to their chosen vocation. Through a representative, they make known

their need to the director of the Center. The latter secures information as to the size of the group and the earnestness of those in the group. He then consults the appropriate faculty of the University and forms a joint committee of faculty and prospective students to work out a program for the course of instruction. Together the committee members select a time for the course, decide upon its duration, pick out the instructors. When all plans have been made, the Center sends to all members of the group an announcement of the course. The latter register just as they would register for any University course. At the proper time they appear at the Center for instruction, living in the Center's dormitory if they so desire. If all of the instruction can not be given in the classrooms of the Center, they meet where the University or affiliated agencies have provided the necessary technical equipment.

What are the subjects taught? Mr. Nolte rephrases the question. What subjects are studied?

At the Center there is surprisingly little "teaching," at least of the time-worn, dogmatic, *ex cathedra* type. The groups usually know thoroughly the groundwork and the basic techniques of their subjects; they are interested in specific answers to specific questions; and woe to the instructor who tries to feed them on "canned" pabulum! During the first three years, the Center students discussed and studied a bewildering variety of subjects. Among them were cooperative management, nursery teacher training, waterworks operation, pharmacy, police training, architectural concrete, machine design, educational guidance, traumatic surgery, cereal chemistry, photography, probation and parole problems, hospital administration, technique of writing, library practices and problems, diagnostic radiology. There were many others, but this list indicates the diversity of interests made apparent by the Center's plan of operation.

In the comfortable atmosphere of a club, but within easy reach of libraries and research laboratories, it is possible to develop procedures and techniques that are not too common on the

American university campus, where academic progress is by funicular jerks of fifty-minute periods, with constant changes in direction—from French to mathematics and from mathematics to art.

Some New Trends in University Extension

It would be impossible to catalogue all the ways or to name more than a few of the places where extension work has taken a new turn because of the widespread, deeply running influence of adult education, the sources of which have been outside the colleges and universities, in other than academic classes. The phrase "adult education" was seldom seen in the announcements of extension divisions twenty years ago. Now it is an accepted general term for the whole field of advanced, extramural activity.

In 1926, a national organization, the American Association for Adult Education, was formed to further the general idea of continuing education. Frederick P. Keppel, President of the Carnegie Corporation of New York, forecast a program of general adult education which was to become a main concern of the Corporation. Adult education he defined as "the process of learning on the initiative of the individual, seriously and consecutively undertaken as a supplement to some primary education." We must get rid, he said, of the idea that adult education is necessarily for the benighted. Clinical classes for practicing physicians, classes for engineering executives, should be recognized as falling within any adequate definition of adult education. "Our main line of development in cultural education for adults," said Mr. Keppel in 1926, "will be to broaden our existing programs in the vocational field."

The American Association for Adult Education, directed from

the beginning by Morse A. Cartwright, has consistently interpreted and supported experimental and exploratory activities in adult education at all levels. *The Handbook of Adult Education* of 1934, revised in 1936, lists thirty-four subdivisions of adult education and some 1,000 national and local organizations. The work of these organizations has been described and evaluated in national and local conferences, in the Association's periodicals and books, in the reports of the director, in the *Journal of Adult Education,* and in the series of studies of which this on universities and colleges in adult education, is the twenty-seventh. "The emphasis," wrote Mr. Cartwright in his decennial report, "is all new, the belief that adult education will yield major satisfactions is new, the belief that adults really can learn well is new, the conception of abundance of living as the undeniable educational heritage of every individual is new. These are the warp and woof of the new adult education: the patterns as they strike the eye may *seem* important, but fashions change. The mere forms of yesteryear and those of tomorrow may be the same or they may alter."

The universities have now a dual role, perhaps a triple role, in their extramural divisions. First, they present their regular campus courses of instruction in evening and off-campus schools. Second, they supplement the regular courses by new kinds of instruction, also on the college level but not so meticulously measured in units of credit, to satisfy the special needs of adult students. Third, they provide postgraduate, professional, specialized instruction for superior students most of whom can not give more than their evenings or a summer holiday or a single week or an occasional day to studies essential to them in their work.

Cooperation with Lay Agencies for Adult Education

The extension movement, in the judgment of one director of university extension, has failed "in the sense that due account has not been taken of the degree to which extension education is a cooperative undertaking, a people's movement in which the consumers, as in so many aspects of modern life, should have something to say about what is being done for and to them." From his own experience, George B. Zehmer of Virginia cites several instances in which the university has successfully cooperated with lay agencies for adult education, relinquishing more and more responsibility for policy and for management to organizations outside the university: an instance is that of the postgraduate medical instruction to be referred to in the next chapter of this report. As adult students become more active in determining procedures, he believes that less emphasis will be placed on formal courses for university credit and correspondingly more emphasis will be placed on informal, noncredit work.

Study at Home

Correspondence study, however, has gone its own way, little influenced by the trend toward informal instruction and noncredit courses. Enrollments in extension classes are not much more than two to one in favor of the credit courses, 176,000 to 85,000, according to the reports of the National University Extension Association. But the ratio is seven to one in the correspondence departments, 56,000 to 8,800.

In 1940, forty-four of fifty-two member institutions of the N. U. E. A. were offering some kind of instruction by correspondence. Enrollments for college credit predominate: the University of Wisconsin had 4,807 active enrollments in college courses;

the University of Chicago, 3,350; the University of Minnesota, 3,061; and 5 other universities had enrollments of more than 2,000 each in college courses taught by correspondence—Alabama, Arkansas, Florida, Georgia, and Kansas. At the University of California, Pennsylvania State College, and Rutgers University, the proportion of enrollments in noncredit courses was somewhat higher than elsewhere.

The range of correspondence study is wide. The University of Wisconsin's list includes advanced courses for professional men, undergraduate courses for students building up credit for college degrees, high school courses, and elementary and vocational courses. At the University of Chicago approximately 350 courses are taught by correspondence: courses of interest to teachers who constitute more than 50 per cent of the enrollment; for people working in business offices and needing special instruction in statistics, law, psychology, finance, or business management; for social workers, in psychology, sociology, public welfare, child welfare, and other special fields of social work; for clergymen and church workers; and for students of college age beginning their college work.

Columbia University closed its home study department in 1936. It had been one of the most highly advertised and had been considered one of the most prosperous of university correspondence schools. In eighteen years, 1919 to 1937, the department had distributed 160,000 courses to some 65,000 persons, spending $4,700,000 and receiving in fees $4,300,000. The cancellation of so extensive a program, so widely advertised, so well provided with funds in prosperous years, conducted by a university of the first rank, calls for a clear explanation of the reasons. The Director of Extension gave it: "Under present conditions in

the field of home study in general, experience has shown that an endowment is necessary unless, in violation of its policy up to the present time, the University should award a degree for correspondence work."

The authorities of Columbia University concluded that a general correspondence school could not be maintained against commercial competition without a widely developed, continuous, and perilously expensive promotion campaign. With registrations reduced in 1934 to a quarter of what they had been in 1932, the Department was still able to pay all charges against it, but by that time public advertising had been given up and field solicitors had been dismissed. In no comment that I have heard by anyone even remotely connected with the correspondence school of Columbia University, is it implied that instruction by correspondence is in itself an unworthy university activity. The University's eighteen years of experience can hardly be called an experimental or a test period to prove the merit or lack of merit in instruction by correspondence; a shorter trial would suffice to show whether such work could be conducted effectively and at a profit or at reasonable cost.

The withdrawal of Columbia University's correspondence courses came at a time when the extramural divisions were exposed to hot fire. They had been severely criticized for excessive promotional activity. The criticism came from the outside, from experienced and influential critics like Abraham Flexner. It came, too, from skeptics within the universities. And just at that time, the extension divisions had to adjust themselves to business conditions under which it was difficult for the man of little means to lay aside enough money for correspondence school fees.

Home study departments are not unusually self-supporting. Where there is a profit it is transferred to the university budget, directly or through the maintenance, as at Chicago, of fellowships for the support of graduate students appointed to act as instructors in extension. Meanwhile the home study departments are apt to be handicapped by the inadequacy of their quarters, by the lack of files or other office equipment, by the denial of appropriations for the revision of courses that have gone unrevised for eight or ten years, or for the development of new, experimental courses. The indifference of university administrative officers and, in many instances, of the faculty authors of correspondence texts and outlines, deprives the home study departments of the refreshing influence of experimental work.

Proprietary correspondence schools operate at a profit. They conduct a correspondence school business with which the universities compete unsuccessfully. Ella Woodyard, in *Culture at a Price,* estimated the total annual income of the proprietary schools at somewhat more than $30,000,000 from more than 500,000 students. The directors of university home study courses look, therefore, with some envy at correspondence school enrollments which surpass in a single month the subscriptions of a whole year for the university courses.

The University of Wisconsin now includes in each of its extension brochures a page of warning against commercial correspondence rackets. The State Department of Public Instruction and the Industrial Commission of the State have issued letters to parents and teachers and have posted placards cautioning the people of the state not to contract for correspondence courses with unlicensed, unaccredited schools and advising prospective

correspondence students to consult local or state school authorities.

It is the judgment of many experienced teachers that correspondence study is a particularly convenient and effective way of carrying on advanced and specialized study.[7] But few graduate correspondence courses have been developed. No institution of high standing in this country will give a degree for correspondence work alone; only a few give direct graduate credit for work by mail.

There is an undeveloped possibility here for an interlocking of extension programs, especially in the preparation, revision, and administration of specialized postgraduate courses for physicians, engineers and other professional groups. Something of the sort has been proposed. Director B. C. Riley of the General Extension Division of the University of Florida, a former president of N. U. E. A., has suggested that the institutions of that Association cooperate in the production of 52 new correspondence courses, each providing the texts for a single course in some chosen, appropriate field. The scheme would be especially effective if a central office of distribution received enrollments and assigned instructors. It is, perhaps, too optimistic to hope that any kind of cooperative management could be made acceptable to the separate and often competitive home study divisions.

"In correspondence study," said Mr. Riley at the 25th annual meeting of the N. U. E. A., "we need to give more thought to our non-credit field. More adults want our help than ever before, but

[7] A definitive study of the whole matter of home study was made by W. S. Bittner for the book *University Teaching by Mail*, by Bittner and Mallory, one of the foundation studies for the American Association for Adult Education, published by The Macmillan Company.

they will not long accept our dingy, typewritten and mimeographed course outlines. . . . Too long have we made the lack of money an excuse for limiting our programs to our own back yard; too long have we balked at state borders. A strong national program built on democratic planning and cooperation fits into the American picture and squares with American tradition."

The Secretary of the National University Extension Association, which has a code of standard practices for the guidance of its own members, has summarized the situation thus: "In general it is true that correspondence courses offered by colleges and universities are both better in quality and less expensive than similar courses offered by commercial or private schools, though of course there are some exceptions and unfortunately the public institutions offer a comparatively restricted range of vocational courses."

The Typical Home Student

The clientele of university extension is the subject of a special research project of the National University Extension Association. Only preliminary and partial data are as yet available from returns on a comprehensive questionnaire distributed to students through eight extension divisions. At the Association's meeting in 1940, Clem O. Thompson of the University of Chicago summarized the reports then received by him from 2,977 correspondence students: 2,447 enrolled for credit courses and 530 enrolled for noncredit courses.

The average age of the credit students is 32.3 years, of the noncredit group 27.5 years. About a third of the whole number live in rural communities or small towns. About a third study with universities located outside their own state. Three of every four

are employed. Almost a third of the whole number are teachers and schoolmasters in elementary and secondary schools. Most of the students reporting give vocational reasons for studying. Nearly 60 per cent say that they are working for degrees or for some kind of vocational certification. They come from the same social groups, from the same kinds of families from which resident college students come. Thirty-three per cent have had full college courses and 25 per cent more had attended college without graduating. The direction of university extension is still sidewards rather than upwards or downwards. The reach is limited.

If correspondence departments are to be expanded and their influences renewed, aggressive leadership is required, limited neither by an antipathy to occupational and professional courses nor by an absolute rule against the academic recognition of work done. That leadership could come under a concerted national plan such as Mr. Riley proposed. It may be developed as part of a national defense activity, comparable to the development in Canada, where university correspondence courses are adapted for the educational advancement of men in camps. It may be sorely needed in the rehabilitation and re-education programs of a postwar period.

The Extension Division's Community

Each extension activity has its own natural area. It is generally defined as a political or geographic area. It may be a state, or only a part of a state. The Tehachapi line marks the boundaries of northern and southern rivalries in California, crossed by lecturers and budgets at their own risk.

A home study department will have enrollments from beyond

the home state boundary; the second largest state enrollment of the University of Chicago is of residents of New York. Extension classes, on the other hand, are held at a limited number of main centers with occasional courses scattered over a state. The area of faculty lectures varies: from Indiana University faculty lecturers will be sent to club groups anywhere in the state, but no farther, for a fee of fifteen dollars to the lecturer himself and without charge for traveling expenses. The University of Virginia declines engagements for individual lecturers unless they fit into a program of consecutively arranged lectures. The University of Minnesota, between 1912 and 1916, arranged "University Weeks" in various towns of the state, circuit chautauquas which were financed both by local communities and by the University. The lyceum program of the University of Wisconsin supports its own budget of approximately $30,000 a year, a normal series of lyceum engagement schedules being four to eight dates in each of 300 communities, including entertainment, concerts and science lectures.

The Institute of Arts and Sciences of Columbia University, a subsidiary of University Extension, has a popular membership of approximately 2,000, almost half of whom are from the immediate neighborhood of the University on Morningside Heights. The Institute runs five or more lectures weekly, using relatively few lecturers from the University faculty, since university professors, like prophets, find their most responsive public audiences at a distance from home. The Institute has given up its traditional Saturday night programs of entertainment, so that concerts and recitals are now in a series separate from the lectures for Institute members. In general, the Institute has broken away from the lyceum plan of a lecture this week and the Swiss

bellringers next. Dramatic monologues are also a thing of the past. The "capacity houses" of late have been for programs on current events.

The Cooper Union Forum, dating from 1868, also draws a relatively local audience, one of the toughest in the United States in that it puts a speaker on his mettle. Twice in one evening, Professor Shapley of Harvard stopped to remark on the acuteness of questions put to him by his audience: one from a shabby, middle-aged man on the behavior of hydrogen atoms, and another from a girl who said she had never before attended a lecture on astronomy but who asked a good question on the possible relationships of galaxies. Sundays, Tuesdays, and Fridays at eight are the regular times of the Cooper Union Forum, each series running through 22 or 23 weeks with audiences of from 600 to 800 each time. The average age of attendants at Cooper Union Forums is 37 years; the graph showing the age group rises to peaks at the ages 40, 50, and 60—from which skeptics may infer that many prefer round numbers to odd numbers in recording their ages, but I prefer to think that when a man turns a decade he begins to consider whether he ought not to do something for the sake of self-improvement.

Hitch-Hikers on the Road to Learning

Hans Zinsser has written that "publicising of culture is a racket. Everybody's a little educated nowadays and they're hungry for easy culture—medicine, philosophy, mathematics, chemistry. They want books about books. They want it in hypodermics or like liver extract."

Forensic leagues (in Texas the University Extension Division has a state-wide organization, sponsoring twenty-five different

kinds of contests in 6,000 public schools); public forums (in Richmond and in Roanoke, the University of Virginia has joined with local councils of adult education in forums now seven years old, and elsewhere in the state the extension division has conducted demonstration forums for which about a third of the lectures and programs are contributed by the University); luncheon lecturers for business and professional men (for twenty years the University of Cincinnati has arranged a weekly series of talks and discussions each year, for 300 or more men of the city); state-wide organizations of women's clubs (at Indiana University a member of the extension staff serves as secretary for the State Federation of Women's Clubs, on the Indiana Health Council, and on the State Congress of Parents and Teachers); book circles (at thirty-six centers in Louisiana, L. S. U. book circles draw on the University for monthly lectures and on the State Library Commission for books); and university radio stations (WHA, the University of Wisconsin station, is one of the senior radio stations of the country, and the University of Chicago's Round Table is reported to have six or seven million listeners each week)—all these are characteristic popular educational programs.

The University's Natural Community

But the university's natural community is not necessarily the whole population of a political area bounded by city or state lines. For a college of medicine, the natural community is that of the local physicians; for the school of education it is the community of teachers and schoolmen; and for the engineering college it is the community of engineers, industrial executives, foremen and skilled workmen of industry. To these special communities within communities, the university has an obligation in higher adult education.

Universities in the National Defense Program

THE VITALITY and possibilities of an institution are shown by its behavior in an emergency. It is then that "the trusteeship of those who man our universities" is tested. The measures to be taken by the universities as part of the work of national defense are of lasting significance. They require the very best statesmanship of which higher education is capable. The new undertakings are as critical as any that have ever challenged college administrators. Questions of direct, inescapable service to the community have inevitably become the primary concern of officers responsible for the policy and pattern of university work. Preparation for war is "ad-hocness" with a vengeance.

EUROPEAN UNIVERSITIES IN WARTIME

In German universities before the war, there occurred an abrupt decline in student enrollments, from 85,394 in 1923 to 43,034 in 1937. Attendance at technical colleges dropped, in that time, from 26,640 to 9,554. The change was disconcerting to Nazi authorities, who appreciated the fact that success in modern war is a corollary of sound, progressive, technical education and that failure to retain leadership in scientific study and research would

show a vital national weakness. After 1937, the figures on university enrollments were omitted from the statistical yearbooks. The German army itself then started a Science Department so that researches affecting military strength would not be neglected.

When war actually broke, the universities of the chief contending countries were depopulated. By the end of 1939, half the universities of Germany were closed; the University of Paris had shrunk from 20,000 to 5,000; and in England the city institutions, including most of the departments of the University of London, had been transferred to rural communities. What has happened in France since her military collapse, it is impossible to say, but it is safe to assume that the universities there have not escaped the devastation and depletion that have altered the higher schools of other overrun countries of Europe. The experience of England has been reported by an understanding observer, the President of Harvard University, who has been there to see with his own eyes. What he reported when he returned is indisputable evidence of the fact that colleges and universities are themselves essential defense industries. His report suggests procedures which we may presently be obliged to imitate. In those procedures, the extramural agencies of the colleges and universities will have heavy assignments and unprecedented opportunities.

In 1939–40, university enrollments in England, aside from the University of London, had fallen to 85 per cent of the normal number of men students, and in the next year they were reduced by another 20 or 25 per cent.

With the lowering of the age of military induction to eighteen and one-half years, new regulations will say what boys shall continue their studies and for how long; students of the arts may

have one year of university schooling, students of physics and chemistry may have two years, and the most promising of them may be kept for a third year at the university.

CANADA'S SCHOOLS IN THE ARMY

In Canada it has been assumed that war may last ten years or, at least, that young men may be required in the military establishments for as long a time as that. What, meanwhile, is to happen to their education? One answer was proposed by the Educational Services Committee appointed by the Canadian Legion War Services: that the men in the army be encouraged to register for correspondence study in specially prepared courses derived from the correspondence curricula of the extension divisions of the Canadian universities. Since soldiers must be moved from place to place, uniform standards of instruction are required and—even more important to them—some uniformity in the accrediting and validation of their wartime studies. Education in Canada previously has been organized in provincial units. One consequence of the new organization to meet the special conditions of Canada as a military unit, a consequence of no small social significance, is that there is now for the first time a Dominion-wide system of education with uniform requirements for the school-leaving certification of students.

Our problems in the United States will surely resemble those of England and Canada. We may be obliged to regulate the terms of study of university and college students. We shall have the problem of compensating men in service for the time they have lost from education. We may follow the Canadian example, perhaps selecting from the great mass of correspondence study material, from all that is available in the university catalogues

for home study, and from the offerings of proprietary schools, a union list of courses to be offered to men in service. We too will then have to decide on what levels and for what academic recognition the wartime studies of soldier students are to be accredited when they return to civilian life.

ENGINEERING DEFENSE TRAINING

Our foremost adult educator in wartime is a lean, tall, determined old gentleman who has a sharp nose and a pointed beard. He used a plow in 1917. He appears now in posters and placards with his sleeves rolled up, an anvil in front of him, his high, star-dotted hat pushed back from his brow.

In World War I, our duty was to produce food for ourselves and our allies. In a single year, 1917, the appropriations for agricultural extension and its personnel at work in this field were doubled. In World War II our prime function as the arsenal of democracy is to increase industrial production, to train more men for the first line of defense, the production line. What might have been said prophetically a few months earlier, of the new responsibilities of colleges and universities in the technical and industrial departments of adult education, could be said by the spring of 1941 as a report of works actually begun and well started.

In June 1940, $15,000,000 were appropriated to the United States Office of Education for training in courses "of less than college grade." To this was added later a second appropriation of $44,000,000. Both appropriations were to be expended under the supervision of state boards of education. By June 1941, in just a year, 900,000 and more people had gone through these courses. This is an impressive accomplishment in adult education, impressive in itself and also in its effect on public morale,

for it helps to restore some of the human power lost during the depression.

THE COLLEGES START DEFENSE TRAINING SCHOOLS

The engineering colleges were not called into active service until the fall of 1940. During the summer of that year, an advisory committee, led by A. A. Potter, the Dean of Engineering of Purdue University, made a quick survey of the personnel needs of government agencies and of industry, reporting to the Office of Education. Congress then passed a supplemental appropriations act, signed by the President, October 9, 1940, allowing $9,000,000 to the Office of Education for the furtherance of the education and training of defense workers:

> For the cost of short engineering courses of college grade, provided by engineering schools or by universities of which the engineering school is a part, pursuant to plans submitted by them and approved by the Commissioner, which plans shall be for courses designed to meet the shortage of engineers with specialized training in fields essential to the national defense.

This time no intermediate agency, no state board, was interposed between the Office of Education administering the funds, and the schools engaging to do the work. The colleges themselves were to initiate proposals. A board of review would pass upon the proposals coming from the colleges, approving them or rejecting them; this was a national committee of which all but one or two members were from university faculties. If colleges were wary of federal influence, these provisions—giving the colleges direct influence in the Office of Education, inviting each college to choose and define its own proposals, and appointing univer-

sity officers to serve on the board of control for the allocation of funds—were well calculated to dispel or temper fear of excessive interference and control from Washington.

In preliminary estimates of the impending shortage of technically trained men, the National Advisory Committee forecast that 85 per cent of the need would be in defense industries and not over 15 per cent in the technical services of the combat forces. What types of men would be needed, in what communities and in what numbers, would have to be ascertained by regional surveys.

In almost every respect the organization for engineering defense training was new. It established a new kind of relationship between the higher technical schools and the Federal Government; it called for a new kind of cooperation between industry itself and the schools if the new schooling was actually to meet the varying local needs of industries; it gave opportunity for specialized education, on all college levels, even to the highest, at government expense; it required that standard college courses be rewritten to fit the needs of young men entering employment for the first time and for older men already at work in industry for whom refresher courses and re-education were a first move to greater or changed responsibilities; and—not least important—it offered a new opportunity for regional study of the relationships between schooling and work, between technical theory and industrial practice.

The country was divided into twenty-two regions, in each of which a special regional adviser was appointed. It now remained for the colleges of each area to decide what training courses were needed in their own districts.

The requirements of the defense industries were pressing. Plans had to be made for the promotion of men all along the line. This called for refresher or upgrading courses, most of them to be given at night. It could not be assumed, however, that even the normal number of cadets entering industry from the technical schools would be available or that such a number, if it were available, would suffice. Therefore pre-employment training had to be given.

Regional surveys established the need for the program of engineering defense training and for speed in its development.

For instance: In Pittsburgh and the eleven surrounding industrial counties, representative manufacturers reported to the Regional Adviser of the district that as many as 3,000 additional technically trained men would have to be recruited for the defense industries between the fall of 1940 and the spring of 1941, men with sound technical training in design and drafting, in inspection and testing work, in physical metallurgy, and in production supervision and control. The Pennsylvania State Employment Office had on its lists only 257 men who might qualify for the new positions. This was at a time when the United States Bureau of Labor Statistics estimated that the defense program would require $3,445,000,000 worth of iron and steel and $300,000,000 worth of non-ferrous metals and their alloys.

And again: In metropolitan New York, deans and presidents of nine engineering colleges and universities, with Thorndike Saville, Dean of New York University, as Chairman, decided to make a quick door-to-door canvass of the defense industries. The American Association for Adult Education obtained a grant for

the survey from the Carnegie Corporation, and a field staff of eight men, each at home in at least one special field of industrial work, canvassed 178 manufacturing plants which had or might be expected to have contracts for defense work. The observations reported to the Committee were these:[1]

(a) that within a year as many as 6,000 engineers and sub-engineers would be needed in the aircraft industries of this area where all the engineering schools together would graduate only 1,200 engineers in a year;

(b) that other kinds of defense industries, not at the time feeling the full force of the defense program, might require as many as 1,500 trained men;

(c) that it would not be enough for the colleges of the district to plan only upgrading courses. New sources of man power must be found; and pre-service training given;

(d) that high school graduates could be trained in quick, intensive courses to serve as assistants to engineers;

(e) that college graduates who had had good preparation in physics or chemistry should be given special training to qualify them immediately for positions in industry.

Plainly the place for the New York colleges to begin their defense training was at the two points of concentration of aircraft production in the New York area. It was decided to place training centers near each of these centers, one at Stevens Institute of Technology and another in Brooklyn, as a joint undertaking of eight Manhattan and Brooklyn colleges of engineering, under the direction of a board of managers composed of their presidents and deans.

In addition to 700 to 800 men in these two sub-professional courses, nearly 3,000 men were soon enrolled in 50 or more ad-

[1] Survey of Need for Technical Training for Defense Industries in the New York Industrial Area, November 18, 1940; James Creese, Director of Survey.

vanced courses conducted by the New York City colleges. Across the Hudson River, in the 5th region, special extension work was undertaken by Newark College of Engineering (1,720 students), Rutgers University (693), Princeton University (60), and Stevens Institute of Technology (679). The four New Jersey colleges, at the advice of the Regional Director, Allan R. Cullimore, President of Newark College, took special assignments: Stevens Institute to train engineering apprentices for the aircraft industries; Princeton to work out research problems presented by arsenals and in ordnance; Rutgers to establish off-campus classes wherever plants had need for them; and Newark to care for the requirements of Essex County industries. A study of industrial needs made by Princeton University had emphasized the shortage of supervisors and foremen able to break in new employees. The New Jersey colleges joined in organizing two short, intensive courses for the training of such men, at the Stevens Engineering Camp.

A NATION-WIDE SYSTEM OF EDUCATION

The same thing has happened all over the country. Posters appeared on the bulletin boards of mills and schools, leaflets were distributed through Y.M.C.A.'s and libraries. In Baltimore, 1,600 men applied for courses designed for 225; Schenectady had 962 qualified applicants for courses planned for 420. Illinois Institute of Technology proposed to take 491 students for special training: 2,000 applied; 1,000 were accepted. The University of Toledo undertook to conduct seven courses for 215 students, received 1,100 applications, and admitted 720. At San Diego, the University of California made preparations for 100 students and finally accepted about 1,000.

From the point of view of regional organization, the Pitts-

burgh area, Region 11, is particularly interesting. The area includes all of Pennsylvania except the southeastern corner (Philadelphia), and all of West Virginia. Here, by February 1, 1941, in a homogeneous industrial area, six colleges gave instruction to 15,139 men: Bucknell University in two cities for 144 worker-students; Carnegie Institute of Technology in 5 cities for 1,715; Grove City College on its own campus for 46; Pennsylvania State College in 37 communities for 9,632; the University of Pittsburgh in Pittsburgh and 3 other centers for 1,812; the University of West Virginia in 13 places for 1,790.

Instruction at a few places began as early as December, 1940, and a considerable number of courses got under way in January, 1941. By the end of May, 139 of 151 eligible institutions, colleges and universities, had established defense training courses in 46 states, the District of Columbia, and Puerto Rico. In all, the colleges were offering 1,832 courses for a total authorized enrollment of 112,708. No tuition was charged for any of the courses, since federal allowances cover the colleges' out-of-pocket expenses. No question of academic credits or degrees was involved. Subjects ranged from the basic courses in physics, mathematics, engineering drawing, and strength of materials to aerodynamics, meteorology, and geometrical optics.

Here beside the universities stands a completely new government sponsored, college administered, regionally organized system of higher adult education. Modified to suit peacetime conditions, it may have a permanent place in the school system of the country—a complete system of "industrial extension" serving industrial communities in much the same way as agricultural extension has served the rural and farm population in every state and in almost every county.

THE EXAMPLE OF AGRICULTURAL EXTENSION

This is not the place for a detailed account of the organization or the methods of agricultural extension. Russell Lord's report, *The Agrarian Revival,* published by the American Association for Adult Education, relieves us of the necessity to stop here. But the success of agricultural extension offers a convenient model for other forms of adult education and an example not to be overlooked.

No other agency of adult education reaches so many people so effectively as does agricultural extension. It has been stimulated by public interest, financed by federal, state, and county funds, directed and staffed by colleges and universities, and extended by county agents and volunteer workers into every agricultural county and township. The Agricultural and Home Economics Service employs more than 8,500 professional workers and perhaps as many as half a million lay volunteers in a national scheme of education. The scheme is directed, on the one hand, to specific technical and professional problems and, on the other, to the economic and social concerns of the farm community and home. Beside this vast organization, reaching 6,000,000 to 7,000,000 people, all other extramural engagements of colleges and universities are overshadowed.

Agricultural extension has not followed a shoddy, unscholarly, one-track course. It has touched every part of life on the farm. It has used all the techniques known to adult education: demonstration and lectures, group discussions, panels, short courses, institutes, conferences, film libraries, and bulletins. Borrowing package libraries from the state universities, appointing their own leaders, farm men and women in 80 per cent of America's

counties meet regularly to discuss issues of farm and public policy.

In agriculture the gap between theory and practice, between research and application, has been partly closed. The Dean of the Agricultural College of the University of Wisconsin and the President of Pennsylvania State College have told me in almost identical phrases that, thanks to the Agricultural Extension Service, farmers of their states now use the language of science as the professors and research workers themselves use it, exactly, with understanding, and with facility. Dean Christensen's phrase was that the farmer of Wisconsin had come to realize that the real "pay dirt" is in fundamental research.

When it reaches this point, when the men of any profession or occupation recognize that scientific research will give the answers to their most perplexing questions, then the classes and demonstration groups in which they meet are the proper business of a university.

INDUSTRIAL EXTENSION FORECAST

If, then, our experience in the first World War offers any prophecy as to what may happen in the present war, we may interpret the introduction of defense training work by colleges and universities as the first phase of a program of industrial extension.

The task, first of defense training and then of adult education in technical fields, is one of magnitude and is essential. This may be inferred from the estimates of the American Youth Commission that lately there were 4,000,000 young people in this country who were neither in school nor employed, that 70 per

cent of these were trained for no skilled job and 40 per cent were completely without training for work of any kind.

Two ways in which an established system of industrial extension may supplement and improve our system of technical schools suggest themselves: first, such extension centers as those developed by Pennsylvania State College in 125 communities may become "technical institutes" which some of the best observers have said we lack,[2] offering terminal technical courses, shorter and less theoretical than the four-year college of engineering; and second, if the system of regular, specialized, advanced technical courses is perpetuated, the colleges may correct a fault to which the accrediting committees of the Engineers' Council for Professional Development have called particular attention, "their failure to impress on all students that a successful engineer's life demands continuous study throughout its length."[3]

THE NEED FOR "TECHNICAL INSTITUTES"

One of the serious defects of the American school system, as compared with that of pre-Nazi Germany, is that few alternatives are offered to the pre-college and college courses. In both countries only a small percentage of young people actually reach college. In Germany the others were deflected, permanently, deliberately, and presumably with some consideration of the individual student's gifts, into *Volksschule* or continuation schools. In America

[2] Report of the Committee on Aims and Purposes of the Society for the Promotion of Engineering Education.

[3] "Present Status and Trends of Engineering Education in the United States" by Dugald C. Jackson.

they drop out forever at the sixth, seventh, eighth grades, each year through the high school course, and, finally, many disappear from college with no more credit for years of effort than a curt note of failure from a dean's office. Ours is a classless education, to be sure, but it puts an unnecessary stigma of failure on too many of our young people. They are penalized; so is industry; so is society. For we have not succeeded in setting up schools to match the abilities of students.

One almost fatal gap in a civilization so completely and characteristically industrialized as ours is caused by the absence of schools in the mechanic arts and trades for boys of eighteen and older. Since the number of such schools is negligible, boys of mechanical bent go to the engineering colleges or elect science in the arts colleges, where they are not at home, where they can not get the simple, practical training they need, and where they occupy places that would be better filled by boys more skillful in mathematics and science. Many municipal and state institutions are restrained from discriminating among high school graduates and must take most of the boys who come to them. The presence of this large group debases higher education and obliges many schools to give rapid, descriptive, picture-book courses on the current practice of industry rather than in the fundamental subjects on which all successful, truly professional work must be built.

The discards of technical colleges do not give a sufficient supply of adequately trained personnel for the other-than-white-collar, technical jobs to be filled in industry. The needs of modern industry are not to be met by turning over to industrial employment men who fail in engineering college courses. Failure in college is no encouragement to future success.

INDUSTRIAL EXTENSION STARTED AT WISCONSIN

Industrial education is one of the fields in which the university extension division can still experiment to advantage. Some of the best traditions of university extension favor the experiment.

From the very beginning, in the mechanics' institutes of the past century, in the university lectures begun by James Stuart of Cambridge for workmen of the railway yards at Crewe, in the tutorial classes of Oxford, in the extension center started by President Gilman of Johns Hopkins for industrial communities near Baltimore, in the work of Dean Reber at Pennsylvania State College, even before President Van Hise called him to Wisconsin, are premonitory suggestions of the need for an extension work which would link the higher institutions of education to industry and would serve industrial workers.

"THE WISCONSIN IDEA"

In the entire history of university extension, no event had more critical importance than the re-establishment of the Extension Division of the University of Wisconsin by President Charles R. Van Hise and Dean Louis E. Reber in 1906–07. The revival at Wisconsin led to restoration of partly abandoned extension divisions in universities all over the country, at privately endowed institutions as well as at state universities.

It is no accident that the state of Wisconsin took an early lead in the encouragement of vocational education and long maintained that lead. A senior extension teacher has reminded me of a significant coincidence: that President Van Hise, one of the prime advocates of university extension, was a graduate of Wisconsin's College of Engineering, and that the man whom Van

Hise appointed to rebuild and direct the University's Extension Division was also an engineer, the Dean of Engineering at Pennsylvania State College. From their time to this, industrial extension has accounted for a large proportion of the extramural work of the University of Wisconsin.

The vocational schools of Wisconsin were an outgrowth of university extension—one of the most notable contributions to the American system of education traceable to the extension movement. The vocational schools established after 1911 in Wisconsin were pioneer schools. They have been models ever since for vocational schools throughout the country. They began in the industrial courses which Dean Reber set up for metal manufacturers in Milwaukee and then for other industries throughout the state.

President Van Hise and Dean Reber served on the commission of 1909 which advised the Legislature to provide for a vocational school system. The secretary of the Commission was Charles McCarthy, Chief of the Legislative Reference Library (then almost an office of the University) and author of a once celebrated book, *The Wisconsin Idea.* The Extension Division, said McCarthy in his report to the Legislature after he had visited the continuation schools of Germany, could not go on indefinitely doing a work of industrial education which might be better done by continuation and trade schools. The University had done the missionary work. Now, as centers were established for industrial education throughout the state, as permanent buildings were erected and permanent teachers secured, the University might provide a circuit-riding staff for still higher grades of work until they too had permanent local homes.

The Legislature receiving the commission's report passed the

Act of 1911 providing for part-time day and evening classes under the direction of an *Industrial Education Board.* The Board consisted of three employers of labor, three skilled employees, the University's Dean of Engineering and its Dean of Extension, and the State Superintendent of Public Instruction. To assure the preservation of an independence which was only slightly affected by the presence of the Deans, the Industrial Education Board was given a peculiar sovereignty: it was empowered to exact taxes from every municipality of 5,000 or over and to order the clerk of each municipality to spread on the rolls a tax which might be as high as one and one-half mills on the dollar. And later, in 1917, when federal funds were also to be made available for vocational education, the representatives of the University were dropped, the Superintendent of Public Instruction was given an ex-officio place, and the Board was renamed *The State Board of Vocational Education.* Lately it has changed its name again to the *State Board of Vocational and Adult Education;* and presently it may make one more change of name and become the State Board of Adult Education, making it clear that whatever funds are to be spent for part-time education in Wisconsin, whether local or federal funds, are to pass through its hands.

The later history of the vocational school system presents both encouragement and a warning to other universities now extending their work into industrial centers. In the beginning the relation of the University to the new vocational school system was intimate, so that there might have developed in Wisconsin thirty years ago a comprehensive program of part-time industrial education, at all levels, parallel to the already well-established work in agricultural extension and likewise inspired or directed by

the University. Today, however, the vocational schools are in no way directly related to the University. Indeed, they are now entirely, perhaps permanently, separated from the rest of the educational system of the state, at times in conflict with the University and with other units of what might have been a coordinated state system of education. There is in Wisconsin a condition which, if it is not class war in education, is something close to it, and it would be a mistake to assume that the greater forces in this competition for public interest are on the side of the University.

This example of divided forces in education should be observed by other states now that the time is approaching when an expansion of industrial education is likely to occur. In more than one way, any such condition of conflict as exists in Wisconsin, admirable as the vocational schools are, is destructive of a coordinated plan of education.

DEFENSE TRAINING IN LAND-GRANT COLLEGES

The Morrill Act of 1862, providing grants of land for the endowment and support of "at least one college in each state where the leading object shall be . . . to teach such branches of learning as are related to agriculture and the mechanic arts," gave a new turn to higher education in this country. It said that these colleges were established "to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

The land-grant colleges are beneficiaries of that Act and of others which in 1887 and in 1914 provided, so far as agriculture is concerned, for experimentation and research, for the popular demonstration of laboratory findings, and for the diffusion of

"useful and practical knowledge" among the people. These colleges are, therefore, the first to which one would look for the industrial extension work that the Federal Government has called for in time of war emergency.

Of them all, the most prompt to respond with a complete and wholesale plan of action was Pennsylvania State College. In its original proposals this one college offered to manage defense training courses which, if they were approved, would immediately apply $1,000,000 or one-ninth of the funds available for college courses, in that one highly industrialized state. By the end of May, 1941, actual disbursements to Pennsylvania State College had reached a total of $704,115. In addition there was being held by the United States Office of Education $991,936 for industrial courses proposed by the college and still awaiting final approval. It is a phenomenal job, in size, in speed of initiation, and in strain put upon the organization of management; nor could it have been attempted, no matter what the urgency, if there had not already existed at that college an experienced extension division drawing its authority directly, and without delay, from the main administration office of the institution and having an equally open channel to the dean and faculty of the school of engineering.

I remember a day in February of 1940, long before there was any talk of defense training, when I came to the campus of Pennsylvania State College at the end of a series of visits to universities and extension departments. I had made up my mind that three factors at least were essential for a full-powered, imaginatively run extension division: first, an informed interest by the chief administrative office of the university; second, a constant contact between that office and the office of the director of extension; and

third, a similarly direct and consistent line of organization from the extension office to each of the main departments or professional schools of the university. One of the criteria by which the extension work of any institution is to be judged, in my opinion, is the distance, intellectual and spiritual, between each two of these centers. I had decided that wherever I met a certain type of administrative organization, I might expect to find a mobile, imaginative, fresh power. I had met many able and clever men and women in extension work, serving their institutions at the rear door, often better than the front office knew. Sometimes and at some places I thought I could understand the impatience or indifference of the academic heads of universities or departments. Sometimes I found two of my three elements, sometimes only one. Some places I could not stay long enough to be sure. But the plan of organization for which I had been looking, I found at a college which six months later took on an astounding burden of training for national defense. It is not necessary to do any underscoring at this point; the figures of the Office of Education speak for themselves.

It was from the Dean of Engineering of Pennsylvania State College, Professor Harry P. Hammond, that I first heard "technical institutes" mentioned as something related to university extension. Looking back at that college and at other state and municipal colleges, I think I can see how university extension may give us the needed terminal courses two years long, in local schools, for the training of boys for industrial employment. If university extension does this, it will have carried to a secure upper level the work begun when vocational schools were established in Wisconsin and—of great moment to the colleges—it will

have given them an effective answer to the problems of overcrowded classrooms and too great academic mortality.

POSTGRADUATE TECHNICAL EDUCATION

More insistent in the literature of industrial and engineering education than the call for technical institutes is one for increased facilities for postgraduate education.

Young physicists and chemists, graduates of arts colleges, need special orientation in industrial work. However well trained in the fundamental sciences, they are not easily admitted to industrial plants and could be more quickly at home in them if they were given first a short course, perhaps through a summer, perhaps at night, in the engineering departments of their own or other convenient colleges. Graduates of the engineering colleges reach a critical point, some three or four years out of college, just about the time when they must qualify for professional licenses, at which time they take with alacrity what few postgraduate evening courses are offered. Both kinds of students, arts college graduates whose interests were primarily in mathematics and natural science, and engineers in need of more profound or of specialized knowledge, are to be found in the defense training courses.

It was obvious before the war emergency that urban universities must offer expanded programs of evening work on the upper levels of technical education. At Stevens Institute of Technology it was announced, in 1938, that certain graduate courses would be offered to evening classes. If 75 or 100 men enrolled, the scheme would be a success, possibly even self-supporting. The demand was far greater than had been anticipated. When classes

began in the fall, 244 students, graduates of 70 colleges, enrolled.

The temper of the new postgraduate instruction in evening colleges has been affected by the same kind of thinking that has caused the movement of adult education. This is education of adults, seriously and consistently pursued from motives which are among the best and most common of adult motives—a desire to deepen and extend one's professional knowledge and occupational skill. In an article on postgraduate training of engineers in *Mechanical Engineering* of January, 1940, Professor A. G. Christie of Johns Hopkins University, then President of the American Society of Mechanical Engineers, said:

> The British Provincial Technical Schools have developed night courses in close cooperation with local industries and the results have been very encouraging. The time is approaching when all urban universities will have to provide full programs of such evening courses. An alternative which is particularly applicable to graduate training is the provision by the university of part-time instruction on certain days of the week for men in industry. These men could be sent by industry on the company's time and expense. The opportunity for these employees to secure advanced degrees by this means leads to the development of earnest, ambitious young men in the organization. Undoubtedly, graduate instruction to men in industry can be provided in the best manner and at the lowest cost in engineering schools when these facilities are available.
>
> When such university training is not available within motoring distance, the industry should supply competent instructors who would conduct classes. Senior engineers may undertake this class instruction themselves if competent, or it may take the form of individual instruction. Older men are sometimes reluctant to give such training since this may lead to their replacement by the younger men. But such teaching keeps the older man abreast of his subject and often induces further study and development on his part. With his wider experience he should always be of greater value to his employer than the student.

The final resort of the ambitious young engineer is home study. Difficult, often discouraging, and time-consuming as this may be, its effectiveness is unquestionable. What one learns by such hard work is not quickly forgotten.

Best results, in Professor Christie's judgment, are obtained with a few students in intimate contact with their instructors: "Much effective graduate instruction is provided when instructor and students sit around an office table and discuss problems. Formal methods of undergraduate instruction must be replaced by supervised self-education." These words are of a kind suitable for adult education. They would have sounded less familiar twenty or thirty years ago. I take them as a confirmation of a thesis: that the greatest social significance of the movement of adult education may be found in what effect it may have on the organized system of formal education.

Extension for Professional Groups

I. TEACHERS AS EXTENSION STUDENTS

THE rapid expansion of our secondary school system during the past forty years has been accompanied by a correspondingly rapid and proportionately large increase in the number of teachers required.

Where were all these teachers to come from? How were they all to be trained? Where could the insufficiently prepared teacher resume her studies and qualify herself to hold her own in an intensified professional competition? How could we transform into such experts as public interest and increasing school enrollments required a generation of teachers whose formal education had stopped with graduation from high school, or had been carried only a year or two at best beyond high school into normal school? In its work for the profession of teachers and for the secondary schools of the country, university extension has performed its greatest and most important social task to date.

The Need for More and Better Trained Teachers

The total number of high school students rose between 1870 and 1900 from approximately 70,000 to nearly 700,000; and again, between 1900 and 1940, to a high mark of almost 7,000,000.

Even in 1910 not more than 10 per cent of the young people of high school age were in school; by 1936 the proportion had increased to 36 per cent. This is the very period of which we have been talking, the period in which Chautauqua, the voluntary associations for the extension of university teaching, and finally the universities themselves were drawing into summer schools and extension classes tens and tens of thousands of schoolteachers. For them, courses in history, literature, psychology, the appreciation of the arts, and the social and natural sciences were not merely opportunities for elevating and cultural experience; they were essential courses of preparation for a high and exacting vocation.

It is a temptation to say, with some implications of criticism and even of scorn, that extension work has been something for teachers. Some came to it of their own volition; some by act of legislature, to acquire prescribed alertness credits and permanent certifications or to earn the extra credits that could be transmuted into more dollars of salary. But behind the acts of legislature were social changes, almost as imperative as acts of God. There were economic forces at work which radically changed the whole social pattern, forces which left their imprint nowhere more clearly than on our system of secondary schools.

The organization and the processes of American industry were suddenly changed in this time, while horse power replaced hand power and the machine released men from the factory. I do not know what economists say about it, but I think it must be true that most of the surplus labor, laid off from the factories, has been absorbed in the schools. The new leisure created by the rationalization of industry and by mass production has been

assigned first to the younger generation. In the consequent difficult social adjustment, university extension has had no insignificant part.

It has been said often and quite correctly that the average extension student is a teacher in her thirties. Even during the past decade, teachers have outnumbered every other occupational group in off-campus and evening or summer studies. In a nation-wide study of university extension students in 1938, it was estimated that schoolteachers provided from 30 to 50 per cent of the extension enrollment; in one institution 90 per cent of the extension students were teachers. At the University of Chicago in 1930, 50 per cent of all persons in class and correspondence study were teachers; in the summer schools of the country in 1931, 60 per cent of the 400,000 students were taking courses in education (and who else but a teacher would take a course in education?); at Teachers College of Columbia University, the part-time, in-service students, taking courses amounting to less than eight points of credit accounted for approximately half the enrollments through the regular spring and winter terms of 1939–40.

The record of progress and error in the training and retraining of this one professional group, the teachers of the secondary schools, is more than a mere chapter in the history of adult education; it is the record of a social experiment, worthy of study, not always to be imitated, in the planning of postgraduate education for other professional and occupational groups.

The Teacher of Forty Years Ago

After forty years, the village school is still of red brick, but it is now the largest and most ambitious building in town, self-

conscious and Georgian. The inner changes have been comparably great.

In 1907, the schoolteacher of the rural community had had little education beyond the eighth grade. In Ohio she might have had two years of high school education; in Kansas, one. Even that little was more than might have been expected of her in 1898 when less than 40 per cent of all teachers in the public schools had had normal school education, only a third were graduates of normal schools, and most of the others must have won their appointments with the most casual of references to educational qualifications.

In the cities, salaries were higher, schools were better equipped, and there were more opportunities for the teacher to study the subjects she taught and the tricks of her trade.

Certification of Teachers

The authority in the certification of teachers has gradually moved from local committees—who examined attestations of moral character and the teacher's ability to keep order in the schoolroom—to town and county officers, and finally to the state which, by acts of legislature, prescribes the educational requirements for appointment and promotion.

It was the custom once for a beginning teacher to start her career in the lowest grades where the need for scholarship and experience was thought to be least. In 1898, no state required even a high school diploma of a candidate for its lowest certificate. The standards were steadily raised as the state departments of education became the central licensing authorities. Credit for two years of college work was required of the beginners. Instead of termless certificates or life certificates, provisional cer-

tificates were issued, valid usually for a period of not more than three years and renewable only if additional credits for semester hours of college work could be presented. And so on, to the higher professional certificates. Each change drove the teacher back to school; and if she was to study while she taught, schools must be provided.

Neither Holbrook's lyceums nor the Reading Circles of the Chautauqua Institution would suffice, though at one time as many as 75,000 teachers were said to be reading the prescribed books of the Chautauqua series. Certificates earned at Chautauqua were recognized by state departments of education. University extension, imported from England, where it served teachers more than any other adult students, was quickly adapted to the needs of American teachers. In 1897, the American Society for the Extension of University Teaching arranged special courses of lectures for schoolteachers, and had them meet in school buildings. Dr. Vincent's summer Chautauqua assemblies, begun for teachers in the Sunday schools and developed as a Teachers' Retreat and a Teachers' Summer Institute, was an example, if not a model, for the five hundred or more summer schools of today.

Normal Schools and Teachers' Colleges

The normal school idea, still new in the sixties, when there were only eleven in the United States, at first spread slowly. Even at the turn of the century, normal schools were graduating about one-fifth as many teachers as were required each year in the expanding public schools. Their students, many of whom obtained teaching appointments without finishing the normal school course, returned to the schools to resume their studies or for

in-service training. But the bachelor's diploma was required. In all parts of the country and with disconcerting suddenness, the normal schools became teachers' colleges, extending their course of study in time and content. They gained the right to award, first, the bachelor's degree and, soon afterward, the master's degree in education. It may not be long before they have Ph.D. powers too. In outlying communities—as in the Connecticut Valley, where Boston University long maintained a summer school and where the Boston University-Harvard University Extension Commission has kept school in five or more extension courses, the local teachers' college has given lively competition.

The competition touches the university closely. In the state of New Jersey there are six normal schools, now colleges, all under control of a State Board of Education, whose curricula are steadily "being broadened to include liberal arts, science, and vocational specialties." Local pride in a state teachers' college and a public demand for higher education at home have sometimes turned against the university, elsewhere as well as in this one state, a sharp and disparaging resentment. It is argued that the state can educate its young people more economically in their home communities: "The youth of New Jersey," says an editor,[1] "are victims of the trustees of Rutgers College in New Brunswick, who would rather see the youth of New Jersey go without a college education than to see the state get more for its money by increasing the appropriation to the six [teachers'] colleges owned and conducted by the state. . . . The cost to the State of educating one student at Rutgers is $420, and the cost of educating one student in any of the six colleges run by the state is $220. . . . The right place for the state to spend money on higher education . . .

[1] *The Jersey Journal*, Jersey City, New Jersey, June 19, 1940.

is, of course, . . . the State College on the Boulevard." The rise of junior colleges conducted by extension divisions is one of the university answers, in various parts of the country, to local demands for decentralization of higher education.

Teacher Enrollments Diminishing in Extension

I have the clear impression that the teacher enrollments in university extension are steadily diminishing.

Chester Allen of the Extension Division of the University of Wisconsin, who has charge of the organization of urban centers for itinerant teaching, confirmed this impression by what he said on the subject at the N. U. E. A. meeting of 1940:

> Originally the program [for itinerant teaching] might have been called a junior-senior program; that is, the largest number of registrants in that program were juniors and seniors, teachers who desired to complete their degree credit and establish their tenure in the teaching profession. Such courses . . . have greatly decreased in number, and in Wisconsin are about eliminated from the University Extension program. Teachers now are all graduates, or practically all graduates, demanding graduate courses, and itinerant teachers in the graduate field can not be economically supported. We have tried it, but the number of students was so small that the cost of the program became prohibitive. University Extension has to be increasingly on a self-supporting basis. Programs producing small fees are now impossible to carry on.
>
> The undergraduate credit program has therefore changed from a junior-senior program to a freshman-sophomore program. . . . Consequently in sixteen places in the state there are being conducted by the University Extension Division what might be called junior colleges or collegiate centers.

The great reservoir of teachers (in service) requiring bachelors' degrees has been partially drained. This conclusion is justi-

fied by evidence everywhere. In the opinion of a veteran in extension teaching, James A. Moyer, director of the unique division of university extension of the Department of Education of the Commonwealth of Massachusetts, the demand for college credit courses is becoming from year to year more restricted for the reason that teachers who have not previously had degrees are "gradually but positively obtaining them." This seems to be the condition in Massachusetts, where ten teacher-training institutions are distributed over the state. Dr. Moyer quoted to me the confirming comment of the director of extension in Kansas that the activities of extension divisions are being transferred to non-credit courses with, as a rule, greatly increased enrollments.

A New Function of Extension: The Improvement of Local Schools

As in Wisconsin, so in Nebraska or North Carolina or Texas, the extension division is serving increasingly in liaison between the university and the local schools, less and less through the indirect way of teaching teachers and more and more directly by cooperative work with school administrators in providing what the schools themselves may lack.

At the University of North Carolina, where recently as many as seven instructors in education were employed exclusively in extension work, now only two are so engaged; and of these two, one field representative, traveling from community to community, is an adviser on the educational problems of local schools. Before 1935, 1,200 to 1,400 took extension credit courses at the University of North Carolina; today the enrollment in these courses is only 300 or 400.

In Texas, likewise, major changes in the policy of the exten-

sion department have been necessary. The objective of the department is no longer the immediate enrollment of numbers of students in extension classes, but the improvement of local schools. A survey of the schools of a community or city is made, perhaps at the request of state inspectors, perhaps in response to an invitation from the local school authorities themselves. Then, if the survey discloses a need for specific kinds of study or upgrading work by the teachers, the extension division provides what is wanted in that particular community. After two school surveys in San Antonio—one resulting in the establishment of a trade school in the Mexican district of the city, the other recommending alterations and improvements in the sixty-three schools of the city—the Extension Division set up an "integrated seminar in progressive education" conducted by five members of the faculty of the University of Texas, department heads in the School of Education, who motor down weekly from Austin to San Antonio. The class at San Antonio is composed of seventy principals and teachers. After an hour's talk on the general philosophical, psychological, or administrative problems of the local teaching staff, the class breaks into seminar groups for investigation of special issues. Dean Shelby quoted to me the remark of one of the five professors that, in his opinion, this is "the best advanced or graduate work now being done here in education."

Another possible change in extension procedures is illustrated by the Texas extension staff's three-year effort "to break the log jam on Summer School master's theses." The University of Texas runs the second largest summer school of the South, having annually an enrollment of 5,000 or more. By work in the summers, many teachers establish the course credits they need for a master's degree, but leave off, disappointed, because they lack either

time or guidance for the writing of a required thesis. The Extension Division appointed an adviser on theses. He goes to San Antonio or to Dallas, for instance, for a Saturday each month through the winter season and meets the schoolteachers who are candidates for degrees at the University. He helps them to define their field problems, usually recommending local subjects. He carries with him bibliographies and reference books to supplement what is available in local libraries. No special points of credit are given for the student's work. He pays a fee of thirty dollars. In 1939–40, there were seventy graduate students in these local seminars. Fifteen of the previous year's class had qualified for their degrees in June, 1939. I was given to understand that the work had produced theses of superior quality, many of which dealt effectively with local school problems.

Cooperation with the Public Schools

Another significant illustration of the "increasing recognition of the fact that the university is an integral part of the total cooperating public school system of the state,"[2] is to be seen in the more general use of home study courses to supplement the curricula of rural schools.

At Benton Harbor, Michigan, in 1922 certain trade and vocational courses for which the local high school could not employ instructors were taken into the curriculum as correspondence courses. A contract was made with one of the commercial correspondence schools for correspondence courses which the home study divisions of the universities could not supply. Since then, supervised correspondence courses have been included in the

[2] Dean F. O. Holt's letter of transmittal of his Annual Report to the President of the University of Wisconsin, 1938.

regular offerings of proprietary correspondence schools and, lately, of the extension divisions of colleges and universities. The possibilities have been most conscientiously explored by the Extension Division of the University of Nebraska. By 1939 the system of supervised correspondence had been adopted in eleven states.[8]

Many of the special courses prepared at the University of Nebraska were in common use outside the state. North Dakota reported that 60 per cent of her high schools, mostly the schools of two or three teachers, were using supervised correspondence instruction to supplement regular courses of study.

As a rule, the local school decides what subjects are to be offered and by whom taken; secures the texts, report books, study materials, and equipment; allows periods in the schedule and assigns study hours; supervises the pupil's study; and passes upon the credit he is to receive. The department of supervised correspondence study of the extension division of the state university prepares the units of study; receives, reads, and evaluates the reports, directing the instruction of individual pupils and of the class as a whole; and takes responsibility for the general plan of teaching.

II. CONTINUATION COURSES IN MEDICINE

There was a time when the young practitioner of medicine could equip himself for life by a few years of work with an experienced and seasoned man. Today the science of medicine advances rapidly and the field in the practitioner's view has

[8] Colorado, Massachusetts (the State Department of University Extension), Michigan, Montana, Nebraska, North Dakota, Oklahoma, Pennsylvania, South Dakota, South Carolina, and Wisconsin.

changed almost beyond recognition in a couple of decades. The young doctor who neglects or does not have opportunity to continue his studies after he has completed his medical course and his internship is out of date.

Until the eighties, the student of medicine who wanted a short postgraduate course or a special clinical experience went abroad for it. Then, about that time, clinical classes for doctors began to be established by medical hospitals in this country so that it was possible to say, as Dr. G. C. Wellner did in 1884, that "New York now offers advantages quite equal to those in London, Paris, Berlin, or Vienna."

So great have been the recent changes in medical knowledge and practice that even the recent graduate feels the need for frequent "refresher" courses.

Initiative Taken by Medical Societies

The local, state, and national medical societies, serving their members in the exchange of information and experience, have taken the initiative in developing organized, consistent programs of postgraduate study. By 1909, some 350 county societies in 29 states were actively engaged in systematic review (sometimes continued for as long as four years) of courses given in the medical schools. In 1913, the Council on Medical Education of the American Medical Association appointed a special committee to investigate several aspects of medical education, including: (1) postgraduate opportunities for review and progressive study by the practicing physician, and (2) similar opportunities for him to make up deficiencies in his medical education.

At length, in 1937, the Trustees of the American Medical Association appointed additional investigators to report on pro-

grams of continuation study in all the states. Associated State Committees on Postgraduate Education were formed, and in 1939 the central organization was made permanent under the chairmanship of James D. Bruce, Vice President of the University of Michigan. Dr. Bruce's report on "Postgraduate Medical Education," published in the *Journal of the Association of American Medical Colleges* in May, 1941, of course attributes the growth of interest in the whole subject to the physician's appreciation of the revolutionary changes caused by modern scientific progress—but he goes on to say:

> Another reason, and I think this is of more than passing importance, is the emphasis put on adult education in general. In some sections of the country, the adult education movement has greatly stimulated continuation studies in medicine. These are the areas where universities have developed strong extension activities. In many communities the medical profession itself has fostered programs of postgraduate training in accordance with its needs for continuing educational opportunities. Still another factor has been the stimulus and support of Federal and State public health agencies and many philanthropies. A final reason has been the increasing recognition of the importance of health on a community, state, and national basis with the collaboration and support of all agencies interested in social progress.

Here, in a statement for a professional group whose work touches the public interest with peculiar power, are suggested several themes of my argument: *that adult education is already having a considerable influence on professional study; that the universities are in a strategic position to increase and direct that influence; that the best kind of cooperation between academic people and people in practice, between the research worker and the practitioner, is essential; that regional and national coordination is obtainable; and that the work of a university in ex-*

tension may vitally affect the whole social organization of our communities, in ways often imperceptible to those who are benefited.

Recent Programs of Continuation Study

In one year, July 1939 to July 1940, 129 programs for the continuation study of medicine were reported from 41 states and the District of Columbia.[4] The estimated attendance in itinerant courses was 20,213; in clinical courses, 15,399; in graduate assemblies, 16,400—a total of 52,012.

Not all of this has been done by the universities. Only 4 of 41 itinerant faculties offering neighborhood instruction to physicians scattered through 31 states were directly sponsored by extension divisions of universities and medical schools. Among the clinical courses and graduate assemblies, extension divisions conducted 5 courses and medical schools conducted 10 of the total of 57. But even when the universities were not officially engaged in the management of traveling schools, their faculties furnished a large part of the personnel for these instructional and clinical courses that not infrequently lasted more than five days and sometimes ran for as long as three weeks.

Postgraduate education may still be desultory and unorganized. Dr. Bruce's Committee is working for a more systematic and orderly process in continuing education "whereby the cultural and professional lag will be shortened and the physician rendered more capable of offering a quality of service commensurate with the health and economic resources of the community he

[4] "Medical Education in the United States and Canada: 40th Annual Presentation of Educational Data by the Council on Medical Education and Hospitals." *Journal of the American Medical Association,* August 31, 1940.

serves, as well as in keeping with the current position of the art and science of medicine."

Sample State Reports on Academic Direction of Postgraduate Study

Michigan: Twenty years ago about a third of the income of the State Medical Society was being expended on one-day or two-day conferences in the principal centers of population of each of fourteen councillor districts. When the experiments did not evolve, as had been expected, into popular, more thoroughly organized courses of postgraduate study, appeal was made to the two medical schools, the University of Michigan and the Detroit College of Medicine and Surgery, for advice and assistance. In 1926, a committee representing the schools and the Society decided that "postgraduate education under academic direction was clearly called for and that the University of Michigan, as a state tax-supported institution engaged in undergraduate medical education, had a particular obligation to undertake such a program."[5] At first, in 1929 and 1930, month-long courses were tried. The average practitioner could not afford so long an absence from his practice. One-week courses were substituted, these being supplemented by four- and eight-week courses in the University's summer school. The present plan of extramural instruction was adopted in 1934. Teaching centers have been designated throughout the state. At each of these, eight one-day sessions, a week apart, are held in a local hospital, under the direction of a local committee. A day's work consists of four hours of lectures and clinical instruction and one hour of discussion. Instruction

[5] James D. Bruce, "Continuing Professional Education," *Journal of the American Medical Association*, April 23, 1938.

is by members of the faculties of the two medical schools and by selected practicing physicians. A summary of extramural lectures is published each year ($1). Continued through four years, these courses qualify a practicing physician to be an associate fellow of the State Medical Society.

In 1939–40, university extramural courses were given in eight centers, with an attendance of 1,179 physicians; fifteen courses also were conducted at the university centers of Detroit and Ann Arbor, with an attendance of 870; the total number of physicians enrolled with the University for continuing education was 2,049.

The Michigan State Medical Society contributes $500 to the annual budget of $18,000 to $20,000 for physicians' courses; income from fees and contributions from foundations each make up about 20 per cent of the cost; the balance has been paid by the University of Michigan Medical School as an item of its regular budget. (Note: The organization of postgraduate work in medicine at the University of Michigan has been followed by like postgraduate developments in other professional fields: dentistry (1935), public health and education (1936), nursing (1937). James D. Bruce, Vice President of the University, is Chairman of a University Division of Extra-Mural Services, correlated with but separate from the Division of University Extension.)

North Carolina: As early as 1916, the University of North Carolina conducted extension courses in medicine throughout the state, sending circuit lecturers into rural areas. The total enrollment in these circuit courses of eight years was 905 (of 2,663 licensed physicians). After a lapse of several years, the Extension Division and the School of Medicine, encouraged by physicians, revived the extension work in medicine. Circuit teaching was replaced by sets of six or seven lectures at appointed centers. The fee for a course is $15. In 1939, sessions were held at

Durham, Charlotte, Greensboro, High Point and Winston-Salem: total enrollment, 292.

Wisconsin: This is a state in which postgraduate work has been conducted chiefly by the State Medical Society, which holds an annual three-day graduate session. At one time the State Medical Society and the Extension Division of the University cooperated in organizing occasional postgraduate courses, but these courses have been discontinued, partly because of the lack of legislative support and partly because of lack of interest.[8] The educational activities of the State Medical Society are now directed by its Council on Scientific Work of which the Chairman, recently appointed, is the Dean of the University School of Medicine.

County, state, and regional meetings of physicians are addressed by members of the University's medical faculty, without honoraria. A package medical library service was organized by the Extension Division of the University and continued by the Medical School.

Georgia: The Medical Association of Georgia works with both the Emory University School of Medicine and the University of Georgia School. The House of Delegates of the Association in 1939 published this statement: "As there are several agencies in the state engaged in postgraduate work and no cooperation between them, all state agencies are requested to coordinate their work and organize their activities under one group." The Association's committee on postgraduate medical education in 1939 recorded its belief "that postgraduate instruction, in order to be effective, should be conducted in connection with the two medical schools of the state."

[8] Report of the President of the University of Wisconsin, 1938.

Virginia: In 1939, the Extension Division of the University of Virginia completed a nine-year program of postgraduate education for physicians. Under this program, lecture-clinics in obstetrics and in pediatrics were given at centers so distributed as to make attendance possible for practically all physicians of the state. The whole undertaking was forecast in a report on *Post-Graduate Medical Education in Virginia* by George B. Zehmer, Director, and George W. Eutsler, Associate Director of University Extension. The Extension Division has acted throughout as executive agency by request of the Department of Clinical and Medical Education of the Medical Society of Virginia. Funds were provided by appropriation of the Medical Society, grants from the Commonwealth Fund, and Federal Government appropriations through the State Department of Health. In an annual budget of nearly $10,000, fees from enrollments yielded $500 to $600. Courses consisted of one class meeting each week, through five or ten weeks. At each meeting, a prepared lecture was delivered by a member of the medical faculty and then followed a clinic, a review of case histories, and round-table discussions.

Twenty-four per cent of all Virginia doctors attended courses on obstetrics, 1932–34; 19 per cent attended courses on obstetrics and gynecology, 1936–38; 24 per cent attended courses on pediatrics, 1936–39.

In the reduced program of 1939–40, the Division assisted in organizing lecture-clinics in three centers; for 25 doctors at Alexandria, 24 at Newport News, and 15 at Warrenton. A short course on Recent Advances in Internal Medicine was held at the University of Virginia Hospital for 21 physicians, this being the first session under the Medical Society's new program of postgraduate education on an advanced level.

Louisiana and Adjacent States: Extramural instruction is planned throughout Louisiana in seminars conducted by groups of the faculty of the graduate school of medicine in cooperation with the general extension division of Louisiana State University. Twelve members of the faculty spoke in the first two-day courses at Lafayette in 1938; more than 100 physicians attended.

A Division of Medical Extension of the Department of Graduate Studies of the Tulane University School of Medicine was organized in 1937 by Dr. Maxwell E. Lapham, who previously had had experience in postgraduate education in obstetrics in the rural districts of Virginia. The Tulane courses are not given in Louisiana (up to 1940) but in the neighboring states of Mississippi (since 1937) and Alabama (since 1939) with the cooperation of state medical associations and with financial assistance from the Commonwealth Fund. In Mississippi in 1939–40, courses lasting one to two and a half weeks were given by twelve instructors, traveling in pairs, at 19 centers, the centers being usually 50 to 100 miles apart: in syphilology at 5 centers for 47 of 201 physicians in the area covered; in gynecology at 14 centers for 149 physicians of 617 in the area. In Alabama, 15 centers, composing three circuits, were covered by circuit instructors in internal medicine. Lecture notes are mimeographed and bound, as a manual of current medical information to be presented at the end of the course to each physician enrolled. Free consultation services were offered to doctors taking the course. In general, physicians in small towns and rural areas were uniformly eager for lectures, for clinical demonstrations, and for consultations.

California: In 1935 the California Medical Association decided to sponsor a series of state-wide graduate courses in cooperation with the state's four medical schools. A cooperative and

uniform program was adopted in 1937. It was planned that at each graduate session an attempt would be made to cover one subject completely, with a physician, a surgeon, a pathologist, and a roentgenologist participating. Local physicians with difficult cases are urged to present patients.

Minnesota: The Extension Division of the University organizes extramural programs for county medical societies and offers intramural courses for physicians in the metropolitan area of St. Paul-Minneapolis. Since January 1, 1937, however, postgraduate medical and hospital courses have been offered independently at the University's Center for Continuation Study. Residence at the Center and fees for a one-week course come to approximately fifty dollars. Teaching appointments are ordinarily made from the faculty of the Medical School, the Mayo Foundation, and state associations. The Center's program of a single academic quarter ran as follows: January 15–20, Hospital Administration; January 29–31, Dietetics; February 8–10, Problems of Newborn and Premature Infants; February 12–17, Proctology; February 12–17, Diagnostic Roentgenology; February 19–24, Otolaryngology; February 29–March 2, Medical Social Service; March 4–6, Physical Therapy Technology; March 11–16, Surgery.

In four years, 1936–39, 37 medical courses (not counting the hospital service courses) were conducted at the Continuation Center, with a total attendance of 920—about one-fifth of all attendance on courses of all kinds at the Center. The medical instruction occupied 216 days of 581 teaching days in a period of four years. Registrations were about equally divided between Minnesota residents and those of other states.

These examples, only a few of many that could be quoted, have been selected to show how widespread and insistent among medical men is the demand for continuing, professional education. Postgraduate education is expensive. The examples cited suggest one danger—the difficulty of financing the work without the aid of subsidies subject to withdrawal when an experimental period has been completed.

In some states there are rivalries to be assuaged—among colleges; between universities, on the one hand, and local professional associations, on the other; as betwixt the university consultant and the local practitioner, the latter often wary lest the great medical corporations of universities and hospitals infringe on his private practice. In advanced study by other professional groups, similar difficulties will arise.

The medical profession naturally takes the lead in higher adult education. The practitioner must have what the university can give him. Otherwise, he loses touch with the men whose researches can change the standards and practices of his profession almost overnight. But the advantages are not all on one side, that of the practitioner and his patient. They are comparably great for the teacher and the student in the medical school. A few sentences by Dr. James Ewing, in an article in the *Bulletin of the New York Academy of Medicine* for January, 1932, are particularly apropos at this point:

> The facilities for medical teaching have had revolutionary advances in the last half century and the results are excellent. Yet the art of teaching remains the same as ever. Here (in teaching) the university spirit finds some of its best expression. . . . Postgraduate education looms too large for the present-day university program, but the task is

taken up by innumerable other agencies. . . . The influence of university men predominates. . . . The close affiliation and union of general and special hospitals with university medical schools and the introduction of the university spirit is the most significant advance made in medical organization in this country. It mitigates the rigid scientific spirit, directs it to the practical problems presented by sick patients. . . . The university medical school has never quite known how to handle the question of the extramural activities of its scholars. In general it discountenances such activities without much concern about their great educational value. It leaves the busy world to take care of itself. It feels little responsibility for the way medicine is practiced. . . . By cooperative intellectual and moral endeavor, we hope to justify mankind's great adventure in altruistic effort, the university.

III. CONTINUATION STUDY IN HEALTH AND WELFARE SERVICES

It is probable that the next big group of evening and summer students is to be found among the social workers of the health and welfare services.

More than a cynical jest lies under the remark that the social workers have taught the politicians new ways to spend the government's money. The whole mechanism of public health, the new conception of government as a community agency for relief of the distressed and the incapacitated, the rise of local and national commissions and authorities for the elimination of slums and the improvement of housing, all the social activities of modern government oblige us to develop with the utmost speed a skillful, highly trained, and almost omnipresent national staff of social workers. Unless we do, extraordinary waste of common wealth will result. If any resent innovation because they distrust reform, they may end by enduring innovation without the advantages of reform. Nothing is to be gained by mere neglect of the problem or by leaving the control of critically im-

portant public works to political appointees and party workers who have "got the smell of the jobs."

The Social Security Act of 1935 and the Venereal Diseases Control Act of 1938 initiated large scale action for the improvement of standards of welfare and health services. But anyone who has had occasion to examine, even superficially or at second hand, the conditions of appointment and promotion in his own community services, must realize the inadequacy of local standards.

In the recitation of the next few pages is suggested an opportunity for university work rather than an accomplishment. What follows is not so much an account of what has been done by universities as it is a hasty view of a vast field in which they can work to advantage. The universities must inevitably enter the field, as a defense move now, and in preparation for an overwhelming task in rehabilitation later, after war is over. The more cruel the country's experiences in war, the more necessary it will be to have an adequately recruited, properly trained service for public health and welfare. As collaborators with the medical profession, the occupational groups to be described here are those who, community by community and in the most intimate relationships, will have the greatest opportunity to repair the damages that may be done to noncombatant victims of conflict, including unestimable numbers of those suffering little physical harm but great mental and nervous distress.

Public Health

A survey of the qualifications of public health personnel was published by the Public Health Service in 1940–41.[7] A question-

[7] Mayhew Derryberry and George Caswell, *Qualifications of Professional Public Health Personnel.*

naire had been distributed through 1,114 jurisdictions and replies were received from 16,670 full-time workers. Those who replied, in all the states and possessions, included 2,076 health officers, most of whom are employed in strictly medical tasks; 7,900 public health nurses; 4,443 sanitation workers; and 1,291 laboratory workers.

The *laboratory workers,* subject ordinarily to a high and conscientious discipline, are shown, in the tabulation of replies, to be better prepared for their tasks than any other group studied. Most of them have had a college background. Specific training in the special field of public health may not be essential for them —surely it is not so much needed in the laboratory as in the inspection services—but as a whole, they have had more such training than the sanitation personnel.

Of the *health officers* themselves, it was found that about half had had academic training at least to the point of receiving a bachelor's degree; but one-fifth of the number reported no academic college work whatever. Almost half of them had had no professional training in public health. The next superior quarter, from the point of view of professional training, had had some special or in-service instruction. Among the nonmedical health officers who reported (only 89 in all), three-quarters had had no college education and two-thirds had had no training in the field in which they work.

The *sanitary inspector* or health inspector was, historically, the first staff worker in the field of public health. His duties are now complex, of great practical importance, and of a kind often requiring highly specialized, technical knowledge which he can not always acquire on the job. In the past he had only to enforce a sanitary code, but his functions have been extended to include

housing supervision; milk, water, and food inspection; and the elimination of industrial hazards. The inspecting staff is by no means a homogeneous group with respect to age, academic education, or special professional training. Thirty-six per cent of 4,443 sanitation workers reporting are college graduates; but almost as large a proportion have had no education beyond high school.

Nurses make up the largest professional group in the public health service. They are the county and ward leaders and the block workers in the organization for public health. About one-fourth of the nurses in public health departments have had less than high school education and relatively few of them have had opportunity to carry their professional education beyond three years of nursing training. Health departments still employ "many young nurses untrained in public health and with little or no experience in either general nursing or public health work."

At present twenty-six universities and colleges offer programs of study in public health for graduate nurses. The whole matter of continuation study, comparable in importance to the post-graduate education of physicians, is the subject of a report now in preparation for the National Organization for Public Health Nursing and the United States Public Health Service. The National League of Nursing Education has encouraged postgraduate preparation for administrators, teachers, and supervisors, and it credits to a committee of the League the institution, at Teachers College of Columbia University, of the first graduate courses in nursing education. At the University of Rochester, a new extension program for registered graduate nurses has been assured a subsidy for three years by the Genesee Valley Nurses

Association, the Rochester Hospital Council, and the Community Council.

All along the line, at least for the education of public health nurses, the experiences in the postgraduate instruction of teachers and of physicians are being repeated. As in the continuation study of medicine, the lead is taken by professional associations in their annual institutes and conferences; as in teacher training, the procedures of alertness credits and certifications recur. A university that does not attach credit to extension courses, Brown University for instance, is handicapped in its work for nurses of all kinds. For advancement, the nurses must have the standard credits. Here again is need for some other form of validation of study than the conventional units of credit; but if no other is available, then once more we shall go through the whole course-credit procedure.

Hospitals

The need for continuing education of hospital personnel has been met chiefly by conferences not under academic direction. Lately, however, an increasing number of short courses and vacation courses for hospital administrators have been listed by the universities. The program of the Continuation Center of the University of Minnesota regularly includes several. At the University of Chicago, an annual Institute for Hospital Administrators has been held since 1933 under the auspices of the American Hospital Association and other medical and hospital councils. In 1941, a first Institute on Purchasing was conducted by the American Hospital Association at Johns Hopkins University with an attendance of 73 business officers of hospitals. An Institute on Hospital Accounting at Indiana University enrolled 70

from 15 states for a series of lectures, seminars, classes, and round-table conferences; the program was designed for administrators of small hospitals, but was attended by so many from larger hospitals that a later session on the problems of the larger hospitals is planned. Work of this kind is natural to the universities, and their touch is needed in it no less than in the postgraduate studies of physicians.

Social Service

Of all the professional groups in the related services of health and welfare, no doubt the largest potential audience for professional and postgraduate courses is of social workers. In the public and private social agencies of New York City alone there are now more than 10,000 social workers; 4,000 taken on by the public bureaus since 1930, 1,500 added by the private agencies. Personality and native good sense can not be supplied by any amount of formal training, but the desirability of thorough preparation for professional work is not, therefore, to be minimized. More and more of the newly created posts are under civil service. In the older departments of social work, for instance among probation officers, are many whose appointments antedate the civil service regulations. Generally speaking, the minimum requirement for appointment of probation officers in New Jersey counties has been graduation from high school, plus one year of social case work in an organized welfare agency; at least one third of the counties in that state are employing probation officers who are not civil service employees, 23 of 130 are not high school graduates.

The experience of teachers in upgrading study is being duplicated by social workers. Forty colleges and universities have

established professional graduate schools and have formed the American Association of Schools of Social Work. The enrollment in these graduate schools increased by 25 per cent during the brief period of the F.E.R.A., 1933–38.

Now, for the first time, in 1940, the number of students in full-time study surpasses the number of part-time students. The pressure on the workers themselves is such that many workers in state agencies have resigned to return to school at their own expense; in Washington, South Carolina, and Ohio provisions for "educational leave" are made by law. Perhaps in many other states use has been made of the Social Security Board's allowance of federal administrative funds to give educational leave, with pay, to state staff members returning to school for refresher courses.

The use of extension courses, graduate and undergraduate, is by no means prevalent. In spite of all the encouragement given by the Bureau of Public Assistance and the Social Security Board, no great number of federal and state staff members have taken educational leaves. In 1940, not more than 116 staff members were sent on leave to the schools of social work. The schools themselves have hesitated to set up full programs of continuation study partly because they wish to avoid an extra drain on the time of their faculties and on the funds of the schools, but partly also because they themselves have had little or no experience in extramural work. Where a school of social work is a department of a university already organized for work in general extension, the appointment of a special extension agent for this one department would place at its command the experience of years in other lines.

One of the dangers in this field, as in most postgraduate extra-

mural education, is that instruction in mere methods and techniques may have more attention than the study of the general economic and the particular social conditions that must be understood by the good social worker. The university's peculiar contribution in postgraduate education is not that of a severely specialized school of current practices. The university is the place where new masses of scientific and social facts, new appraisals of pertinent governmental action and of popular forces, new measures to match new times, may be coordinated in a program of general, professional education.

IV. EDUCATION IN GOVERNMENT SERVICE

Sir Horace Plunkett, observing the Legislative Reference Library at Madison, remarked that the most interesting thing about Wisconsin legislation of the La Follette era, whether protective, regulative, restrictive, or constructive, was the relationship between government and the university.[8] What he saw was possibly the most deliberate attempt ever made in this country to use a university as an instrument of appraisal, criticism, and improvement of the work of the lawmaker.

Charles McCarthy, who made and ran the Wisconsin Legislative Reference Library, was no ordinary academician in political science. He left off reading Plato and Aristotle and went from the campus over to the capital where he undertook to write the laws and see them passed. The procedure, as he described it, was something like this: A representative from a rural district would come into the library and say that he proposed to introduce a

[8] Sir Horace Plunkett: "McCarthy of Wisconsin—The Career of an Irishman Abroad as It Appears and Appeals to an Irishman at Home," *The Nineteenth Century*, 1915.

bill. He would outline his bill to the librarian and explain what he hoped to accomplish by it. The librarian, after consulting some of the professors at the University, would then assemble a complete record of all legislation bearing on the subject, indicating what had been done elsewhere and in what forms. Experts from the University would be called in and, after a conference with the sponsor, they would assist in drafting the bill. Finally, there would come from the librarian a complete and technically correct version of the bill, drawn to express the purpose of the sponsor.

There were risks in such direct action, as anyone who has lived through our times must be aware. Unfortunately, many people came to believe that the University wrote the laws. The elected lawmakers of Wisconsin can not have been invariably pleased and the politicians were not infrequently resentful of the interference of university professors in practical politics.

It is common observation that government as taught in the classroom is not precisely the same as government practiced in legislative committee rooms, in sheriffs' offices, and in night courts. Mutually uncomfortable as it may be to mix them, the professor of politics and the practitioner of politics have need for an exchange of information. In the end, it might be difficult to decide which had taught the other the more.

A few instances of services to government by university groups will suffice to show the background and to suggest the advantages to both sides of interchange between schools and offices of government.

The League of Minnesota Municipalities

At the University of Minnesota there is a Municipal Reference Bureau which has offices and seminar rooms on the first floor of

the University library. The Chief of the Bureau gives half time to teaching in the department of politics and half time to extension work, acting as Secretary of the League of Minnesota Municipalities. He has two graduate assistants whose compensation is allowed by the University as part of the budget of the extension division. The Director of Extension is Treasurer of the League, which has its own staff consisting of an office manager, legal counsel, a field representative, and a stenographer.

Three hundred and sixty cities, towns, and villages belong to the League and are represented in it by office holders. Dues are paid by municipalities, not by individual members, the fee of each having been doubled or more than doubled (Minneapolis' increasing from $100 to $400) when a five-year period of outside subsidy, by the Spelman Fund, came to an end. The League issues a periodical, *Minnesota Municipalities,* and *The Minnesota Yearbook* ($5), a compendium of current data on state and local government which is used by city officers, financial agencies, schools, and libraries.

An annual convention, a legislative conference every second year, and nine regional meetings, held in the fall of the year, compose the League's schedule of conferences. The convention, held in May or June, is attended by 500 civil officers. The Legislative Conference of 200 to 300 meets at St. Paul when the state legislature is in session, to debate the legislative program and to present to the Legislature such resolutions as are passed by a seven-eighths vote of the Conference. The Regional Meetings, of one day each, are planned to cover the state and one of these may be attended by as many as 60 public officers representing 20 to 25 municipalities; a typical headquarters delegation would consist of the Director of University Extension, the Chief of the Municipal Reference Bureau, and two or three state officers—

the head of the Safety Division of the Highway Department, the Liquor Commissioner, or the state examiner charged with direction of municipal accounting. The conferences are of value to state officers, legislative and executive, who obtain information on local conditions and have opportunity to make local applications and interpretations. It is also an educational aid to city and town officers among whom there always is "a terrific turnover."

Municipal Administration Taught by Correspondence

The Home Study Department of the University of Chicago began in 1937 a new development in in-service training programs for municipal administrators. Courses have been offered in five fields of administration: the organization and function of municipal government, municipal personnel administration, municipal finance, public works, and fire administration. In the first group of 129 subscribers, in 95 cities and 27 states, there were city managers and their assistants, personnel and finance officers, directors of public works and city planning, fire and police chiefs, and a sprinkling of federal, state, and county officers. Only two of the courses have had university credit and in general they have not duplicated courses offered in residence by colleges and universities.

Institutes and Schools of Local Government

The need for trained personnel in local government has prompted many university departments to arrange short courses and institutes, supplementary to an increasing number of schools and departments of public service. Pennsylvania State College has had an annual Institute of Local Government. The University of Southern California conducts a one-week Institute

of Government, attended by approximately 3,000 persons and financed with aid from the city and county. Regular courses for city officers and employees are offered, too, at the University of Southern California's Civic Center, where there is an annual enrollment of 500, 85 per cent of whom are civil servants, one-third with college degrees. The Los Angeles courses do not directly tutor men for civil service examinations, but present subjects of study related to the technical and administrative problems of city government. University credit and a special certificate are offered by the Civic Center.

In the direct language of one high civil officer of a city in the Southwest: "These professors have things in their heads that I need in my business." If the performance is not always up to expectation, if instruction is sometimes dull and routinized, if it is hard sometimes for the teacher to strike a spark, even so there is reason to persevere. Such discouragements are not entirely avoided in graduate school seminars or college classrooms.

A Composite Faculty

Faculties may be recruited from the various departments of a university, from research institutions, civic associations, and from the offices of city administration.

In 1937–38 the Division of General Education of New York University, a private institution, began a series of courses for prospective and present civil employees. No credits are involved and examinations are set only for those who wish to take them. Not infrequently courses are given in cooperation with city and state administrative departments.

Two or three examples will have to serve to show the range and character of the work for civil servants conducted by the

General Education Division of New York University. In 1938 the Civil Service Commission of New York City had applications from 2,500 people who desired to take examinations in housing management. The Commission and the New York Housing Authority requested New York University to set up a lecture course for which presently 1,500 enrolled, and hundreds more were turned away. Though most of the courses offered run down the line of civil service occupations—Bookkeeper, Grade 1; Supervisor of Social Service; Gardener (Department of Parks)—some of the courses are of general public interest, and cross the occupational classifications. An example is the course on Government and Administration of New York City, offered by special arrangement with the Mayor and with the participation of commissioners and department heads of the city government as visiting lecturers. This course may carry credit toward a graduate degree, Master of Public Administration, in the University's Graduate Division of Public Administration, established in 1938 as an organized curriculum of evening courses which were first offered by the division of adult education.

The volume of the work to be done by universities and schools at all levels for the general education and special training of municipal employees, particularly if tenure of office is to have any relation to real merit, is to be estimated from the statement of the Civil Service Commission of the City of New York that "all but 443 of the 150,000 persons employed by the city in its classified services qualified for these positions by examination."

Wayne University in Detroit is one of the few institutions to have drawn federal funds for in-service training programs under the terms of the George-Deen Act of 1936. When these funds became available, the University organized 24 noncredit courses

for public employees in the Detroit area and enrolled 1,200 students for courses on law enforcement, personnel administration, welfare, park maintenance, and transportation.

The Institute of Government at Chapel Hill

In a democratic government where terms of office are short, the elective officers inherit problems and policies with which they are not acquainted. They can scarcely be expected to maintain steady and consistent action unless they have some opportunity to study the policies of their predecessors and to see their duties in relation to other offices.

Professor Albert Coates of the law faculty at the University of North Carolina is the creator and director of an independent Institute of Government, quite separate from the University, occupying its own handsome academic building opposite the campus, with its own staff, classrooms, and housing facilities. It is a center of continuation study in civil service, conducting district and state-wide institutes, three-day, seven-day, and thirty-day schools for mayors and councilmen, city attorneys and clerks, county commissioners, tax supervisors and assessors, sheriffs and clerks of court, city police, prosecuting attorneys and law enforcement officers. In its research and publication programs the Institute makes a vertical study of federal, state, county, and local functions of government in North Carolina.

The Institute at Chapel Hill grew out of a teaching assignment in municipal affairs which took the university professor into the courthouse and the police station. Its direct purpose is to improve the standards and to increase the efficiency of government by eliminating waste, particularly the waste caused by rotation in office and by the overlapping and duplication in the

work of various government departments. But not the least of its uses may be in school, college, and university teaching of the young people of the state who, "learning the way around Rome, will not get lost in their own city hall, county courthouses and state departments."

V. ADULT STUDENTS OF ENGINEERING

Much has already been said in this report about students of engineering, both postgraduate and sub-professional students. To what has gone before with reference to "technical institutes" one further word is to be added.

Schools of this kind, giving practical courses of instruction shorter than the ordinary four-year course, if independent and successful, tend to become strictly academic, four-year colleges of engineering. The change lies deep in nature. A metamorphosis occurs. If the sub-professional school is not strictly independent but is part of a college, occupying the same buildings at night and employing the same staff, then it gradually takes its character from the college itself. An evolution in the opposite direction, to turn accredited colleges into trade or technical institutes —a transition recommended by Dugald C. Jackson in an analysis of the findings of the Engineers' Council for Professional Development—is not likely to happen.

If, however, the "technical institutes" are operated by extension divisions, if the institutes, scattered over a state, retain everywhere their direct affiliation with a central, degree-granting college, and if the gifted student is permitted to transfer from the subsidiary institute to the parent college or university, then the familiar forces of institutional ambition, success and pride will no longer operate so surely to make the "technical institute" into one more engineering college.

Adult Students of Undergraduate Engineering Courses

Engineering is one of the few professions for which a high school graduate can get his complete professional education in evening classes. The courses of night study may parallel closely those of the regular undergraduate instruction by day. Otherwise the night courses will not be accredited by national professional boards. External forces, professional and legal requirements, have obliged evening colleges of engineering to standardize their courses. More and more emphasis has been put on purely academic requirements, on artificial standards of admission and the conventional criteria by which equivalence with day undergraduate courses is measured.

The clientele and conditions of evening study differ, nonetheless, from those of day study in ways particularly suggestive of the problems of education for adults.

At Cooper Union in New York, the enrollment of the evening School of Engineering (961) is almost three times that of the day school (336). The students are older. The night school man is about two and a half years older than the day student; it takes him that long to realize that he needs further education and to make up his mind to sacrifice all of his free time to get it. Many are married men, 28 per cent of a recent graduating class. They are not easily discouraged, for of 197 admitted to Cooper Union at the beginning of a six-year night course, 60 completed the course and were graduated.

Special concessions have to be made for men whose preparation in high school was interrupted or was, in some way, irregular. If they pass qualifying tests and entrance examinations, in a severe competition of four times as many candidates for admission as can be taken, then they are admitted as special students.

and are formally matriculated at the end of two years. In a recent night class at Cooper Union, 20 per cent of the students enrolled were special students; about two-thirds of them had qualified for matriculation at the end of the two-year period of probation; and from this group of special students came nearly a quarter of the whole number graduated from the six-year night course.

The fact that the evening student has a daytime job ought also to be a major factor, often the controlling factor, in the definition of his course of study. As many as two-thirds of the night students of engineering at Cooper Union are doing some kind of technical work by day. Nearly half are employed by firms whose work is plainly of a technical kind. For such students, the day's work is itself part of a professional education. Some modification of the regular college course is desirable—however difficult it may be to persuade accrediting authorities that variations from the standard college course are condonable.

One of the more serious problems of a night school of technology is that of placing the graduates in positions of the kind to which they aspired when they entered the course. This, again, is a problem peculiarly significant in the evening college. The part-time student who has made great personal and financial sacrifices to win professional standing and the diploma does not ordinarily have the satisfaction of starting a new phase of his career on the day after commencement. He goes back to the old job, at yesterday's rate of pay, without much immediate excuse for a commencement celebration. For some, a break and a fresh beginning would be the right thing; but a man may have family obligations and a job in hand. Consequently, many stay in their old routine, and some, discouraged and depressed, gradually lose the fine edge. Or a student may steadily advance, while he is

studying, climbing to places of greater responsibility and satisfaction; for such a student, there is no change of direction or material advantage at the exact moment of graduation.

VI. POSTGRADUATE EDUCATION FOR THE CLERGY AND FOR THE BAR

The ministry and the bar are the senior traditional professions and for them, more than for any others, the curriculum of the American college was originally designed. Among directors of university extension it is generally agreed that lawyers are the professional people hardest to reach and hardest to interest in postgraduate education. I believe clergymen may be even more elusive.

Ministers were the first of Dr. Harper's pupils in summer schools and in his private correspondence school. They were also among the early patrons of Chautauqua. A special institution for clergymen and church workers was established at the University of Chicago, the American Institute of Sacred Literature, which is still maintained separately from the extension division, to conduct courses of religious lectures and of correspondence study, without university credit and largely without university direction.

In my own round of university centers there were only two places at which anyone volunteered to tell me how the university could do postgraduate teaching of value to churchmen. At Minneapolis I was told the anecdote of the beginning of the Continuation Center. Some years ago, President Coffman of the University of Minnesota chided a group of churchmen for failure to keep abreast of the times. They replied by asking what the University did to help them or to encourage them. From the time

of this conversation, President Coffman began to plan for the Center for Continuation Study at the University.

The main lecture hall of the Center is still called the Chapel, its rostrum is a pulpit, and its seats are pews. The first conference held in the Center was for clergymen; but they looked one another in their denominational eyes and departed, after that conference, never to return. The Center is now the resort of doctors of medicine, public administrators, businessmen, engineers, and other pagans who know not much of the prophets.

At the University of Pittsburgh I heard an instructor's account of an annual class attended by forty to fifty preachers and priests of several faiths. Together they study the equipment, spiritual and physical, of their churches as institutions of instruction, visiting first a synagogue where meeting rooms and libraries compose a teaching center and where consistent plans of instruction are not unusual; then, perhaps, the class accepts an invitation to a Catholic church where vestments and rituals provide a richer ground for study than is commonly to be had in the plain manners and equipment of Protestant churches.

If there is a special task to be posed for the universities by ministers of the gospel, it is probably concerned more with their education as social leaders and social workers than with their theological and pastoral duties. Their social and moral power is great, for they are the intellectual and religious leaders of 230,000 congregations of 64,000,000 people.

Post-admission Legal Studies

In recent years there seems to have been a steadily increasing realization by bar associations and lawyers that the system of legal education needs to be supplemented by some kind of post-

admission legal education. The Council of the American Bar Association's Section on Legal Education has recommended the adoption of a nation-wide program of legal institutes and seminars for practicing attorneys.

The initiative in providing means for postgraduate education is being taken by bar associations, just as it was by the medical associations. More comprehensive studies are planned than could be undertaken in legal institutes lasting only two or three days. The New York and Chicago Chapters of the National Lawyers Guild offer lecture series on labor law and on taxation. In New York, an experimental course of thirty general lectures and twelve specialized courses, for young lawyers, has been conducted by a member of the bar as a private venture but with the approval of the educational committees of the bar association.

The term "legal institute," designating a brief educational session, has been heard more frequently of late. It represents an experiment in higher adult education in the law. In Ohio, as a typical state, legal institutes were held in only three cities in 1936; but in 1939 there were sixty of them in that state. The educational director of the American Bar Association has estimated that in one recent year legal institutes arranged by local bar associations were attended by 15,000 or more practicing attorneys.

So far as the schools of law are concerned, their most consistent work for graduates in law has been in the publication of law reviews, of which there are some fifty-six, characterized by the Council as the most important medium for keeping the practicing attorney advised of contemporary trends.

Two illustrations will serve to show how the universities may cooperate with and set procedures for the educational committees of local and state bar associations. In one not untypical

institute, managed by the extension division of the University of Chicago, a course of lectures was given on the wholesale revision of the Illinois civil code. This same topic was later taken up at a legal institute of the St. Louis Bar Association as part of a general study of a proposed revision of the ninety-year-old system of civil procedure in the state of Missouri.

In Michigan, where the state university has appointed a general faculty committee to direct extramural, professional adult education, a beginning has been made in postgraduate legal as well as in postgraduate medical education. The first of the University's law institutes, attended by 174 lawyers, were held in 1939 and touched these fields—trusts and wills, taxation, and labor laws. There are many subjects, new in the legal system of the country, suitable for treatment in the lectures and forum meetings of legal institutes: new federal rules of court procedure, wage-hour laws, and the entire field of administrative law associated with new federal bureaus.

VII. LIBRARIANS AND JOURNALISTS

The revolutionary results of modern scientific research have affected first such professions as medicine and engineering where the precedents and practices of a few years ago are already antiquated and have lost much of their validity. The universities are, therefore, obliged to continue teaching their professional graduates, maintaining for them a constant and immediate contact with the research laboratory. But none of the professions is exempt. In an ever widening circle, a wave of influence spreads from the man engaged in fundamental research; through the schools, to the application of his thesis by the physician or the engineer, its exploitation by the man of business, its interpretation by the economist, the journalist, the teacher, the churchman

or the artist, its daily use by the mechanic, the farmhand or the housekeeper, and its social control by the legislator and the judge. At each impact a new and responsive wave may be set up, so that a pattern results in which it may be difficult to distinguish what comes from the center of research and what comes from its practical application. In modern civilization, the university has a peculiar function for the analysis and synthesis of knowledge, pure and applied. It is the natural teacher of larger audiences of adult students than most of us have yet realized.

Among the university's best allies are the librarians and the journalists, but they too are among its disciples. They are so important in the scheme of adult education that I dare not close this chapter on the university's special professional classes without mentioning them.

In the opinion of Alvin Johnson, given in his report *The Public Library—a People's University,* the popular library of the future will be obliged to take a central place in adult education. For that duty librarians themselves require a much more general, a much broader education than a training in librarianship. It is for this reason that discussion has been directed to such questions as these: Should in-service training of librarians be on the familiar professional line or of a broader character? Is it good policy for a library to relieve from desk duty a librarian who is attending general university courses not confined to his special field? Are short courses and institutes for librarians adequate and practical for in-service training?

The answer to the first of these questions provides a premise for other conclusions as to the in-service training of librarians. A statement by Louis R. Wilson defines a starting point: "The fact that 22.7 per cent of the students admitted by library schools had had only three years of academic training or less should be a

matter of serious concern for all librarians who believe the broadest possible general education and extended professional education are essential to effective librarianship." Even those who are college graduates will lack acquaintance with whole fields of knowledge. Special librarians are required and are recruited from the ranks of general librarians; it may be hard to find them among college trained recruits who have majored, for the greater part, in English, seldom in science, economics, and art. Though the librarians have their committees and their annual sessions on adult education, it has been invariably to ascertain their function as educators of adults; not too much attention has been given to adult education with themselves as the students.

A cursory survey of recent publications for librarians discloses that most of the articles are concerned with the mechanics of library work. The same is true of the few extension and summer courses for librarians, and no doubt properly so. The University of Chicago's Institute of Public Librarians, a session of two weeks, generally succeeds, however, in presenting the librarian's work from a psychological and pedagogical point of view. The general themes of the Chicago Institutes have been Library Trends, The Role of the Librarian in Adult Education, Library Administration, and Book Selection. Beyond these suggested limits, a library school can go only if it has the accompaniment of the faculties of arts and sciences; and for that the mediation and management of the extension division are desirable.

Nieman Fellowships in Journalism

Of all recent experiments in adult education one of the most refreshing and most worth watching is that for journalists under

the Nieman Foundation of Harvard University. Each year a dozen or fifteen practicing newspapermen are given roving appointments—their regular salaries paid by the Foundation—to study what and where they will in the University. The newspaperman may attend classes and lectures as he chooses, consult the professors that interest him for his specified line of study, or settle down in the library or in a laboratory for intensive study. The educational resources of the University are entirely open to him—and only think what opportunities for inquiry that may give to a sharp young reporter or an editorial writer for whom science is a source of social similes, all customs barriers between departments being down!

In an article for *Harpers Magazine* (February, 1940), one of the Nieman Fellows, Frank Snowden Hopkins of the Baltimore *Sun,* described the "Quest for Wisdom" by nine newspapermen who spent a year at Harvard. The concluding paragraphs of his essay say what I should like to say at the end of this chapter:

> The idea appears to me sound, with three provisos: the individual must have the mental capacity to do university work of graduate caliber; he must know what it is he wants to learn; and he must give up all thought of working for credits and degrees.
>
> These provisos, I am convinced, are essential. If our difficulties demonstrated anything, it is that a curriculum planned for the training of scholars is ill-adapted to the needs of laymen engaged in a one-year search for practical wisdom. One must plan one's work without regard to academic requirements and then use the resources of the university as they fit in. We saw cases during the year of people from outside occupations who had come back to take regular graduate programs, and had found them too narrow for their purposes. They had allowed themselves to be dominated by the curriculum, and as Humpty Dumpty said, it's just a question of who's to be master, that's all. Unless the outsider has the privilege of auditing all courses, of shifting about at will, and of

cutting across prescribed routines to work on a purely individual basis, he can hardly expect to get the full benefit of his academic excursion.

But it is not only the student who can benefit from a plan of this kind. The presence in a university of laymen who can rove across departmental lines and fit together scholarly findings in a realistic way can do much to take the curse off academic specialization. Our group was told that its influence on Harvard in this respect was not wholly negligible. There are other universities which, even without scholarship funds, might admit each year a few qualified men of affairs, encouraged to graze freely in academic pastures. Is there not reason to suspect, on the basis of the Nieman experiment, that there might be mutual advantage to scholarly learning and the world of action in such an arrangement?

"Scholarly Learning and the World of Action"

SOME years ago, while free universities still flourished on the continent of Europe, Abraham Flexner wrote a book on *Universities: American, English, German*. He attacked indignantly some of the outposts of American universities which are the subject of this report. He may have leveled two or three of them. But his real object of attack was not the extramural extravagances of universities. He aimed at the universities themselves. He meant to reduce the whole university establishment and to cut to a tenth the ill-assorted multitudes of undergraduates, sparing only scholars and disciples of scholars. His main criticisms applied with equal force to American education in all aspects—its miscellaneous curricula, aversion to discipline, and overemphasis on social as against intellectual activity. He was not criticizing courses in accountancy and business English, nor the *ad hoc* coaching of janitors and policemen and morticians in the techniques of their trades, but "ad-hocness" in general.

To many members of university faculties this assault was a welcome diversion. They properly disapproved of frivolous and commercializing influences. They were on guard against the cheapening of higher education.

The extramural activities of our modern universities have been imposed upon the faculties without their consent, or, at least, without their desire. Extension was not adopted by vote of the faculty at the University of Wisconsin; it was adopted by vote of the Wisconsin Legislature. Extension was not formally approved by an established faculty at the University of Chicago; it was made part of the university plan by a new president of a new university who had not yet selected his faculty.

Yet adult education has always found a great part of its ablest and most imaginative leadership among university teachers. Talented and prominent scholars, including some of the most far-seeing organizers of higher education, have consistently maintained for fifty years that the modern university has an emphatic responsibility—and, of course, an opportunity—in adult education.

Gradually, the attitude of faculty members has become more favorable. For some, a reluctant venture into night teaching or an excursion for a term to an adult school of the neighborhood has effected a change. A fair proportion of the whole number of college teachers has accepted the presence of extension students as inevitable and possibly even desirable. These teachers observe that mature students bring to the classroom a variety of experiences, a seriousness of interest, and a seasoned judgment. This, to be sure, is only under the best conditions. Under the worst conditions, with an ill-assorted night class, half schoolboys, half middle-aged and tired women, it may be pretty hard to strike a spark.

The criticism of extension teaching today is not least severe when it comes from those most earnestly devoted to the work. The meticulous insistence upon courses equivalent to campus

courses, the burden of the credit system, the lack of free funds for equipment and experimentation, the difficulty of keeping correspondence courses up to date, the misunderstanding or indifference of high administrative officers, irk them.

Of late—if I read correctly the reports of college presidents—the extramural departments are looked upon with somewhat greater interest by policy-making officers. It is a good omen, if ever the matter of adult education is to be fitted into the university pattern.

THE NEXT TEN YEARS

Three educators met not long ago at the Chicago Round Table to discuss the effect of the next ten years on education. This was the 358th broadcast from the University of Chicago over the Red Network of the National Broadcasting Company. The three men were Edward C. Elliott, President of Purdue University, Robert M. Hutchins, President of the University of Chicago, and John W. Studebaker, United States Commissioner of Education. I would reproduce here, if it were not so long, a passage from the recorded conversation, particularly the last three or four pages. Spoken spontaneously and without script, that conversation names in an interesting order four issues of the next decade in higher education: first, the question of federal subsidies and the risk of government control; second, the claims of vocational education as against classical education in the secondary schools; third, the increasing responsibilities of colleges and universities in adult education; and fourth, the problem of maintaining universities, despite war and all uses of adversity, as free institutions for the advancement and transmission of knowledge.

Adult education takes here an intermediate place, a strategic and mediating position between vocational and academic education, between the everyday, practical affairs of life and the life of scholarship.

OPPORTUNITIES FOR PLANNING

Some measure of planning is essential for a system of education that seeks, as the American system does, to find for each individual a fair opportunity to develop his best powers.

Since the first World War, we have had one notably successful example of nation-wide organization for adult education. Agricultural extension has been supported by federal and local funds, has been designed to function regionally, and has had its best and most effective direction from the home campuses of the state colleges of agriculture. It seems not unlikely, as has been said in an earlier chapter, that there will now appear beside agricultural extension a comparable and perhaps permanent system of industrial extension.

Whatever happens to the national defense training program of this war period, it has been an unmatched example of national planning and regional cooperation. Some friction was inevitable, some suspicion and rivalry, but private institutions and public institutions, state universities and municipal universities temporarily pooled their resources of men and equipment to make possible the prompt training or retraining of people needed in the defense industries. No curriculum designed in Washington and arbitrarily applied all over the country would have served the peculiar requirements of each individual area.

The planning of defense training on the college level has not been done by the extension directors. It has been done by the

executive officers and the faculties of the colleges. The major educational policies of the colleges were involved. Those policies are also involved, as Dr. Flexner made clear, in every extension activity. Indeed, a more thorough planning of extramural work on regional and national lines would give college leaders an opportunity to find out what savings of more than money could be effected by the elimination of some of the overlapping, duplicating, and competing activities of colleges and universities.

There have been a few evidences of a cooperative disposition among colleges in their extramural work. In Massachusetts, there has existed for some years a Commission on Extension Courses which represents seven colleges, as well as the Museum of Fine Arts, the Lowell Institute, the Massachusetts Board of Education and the School Committee of Boston. In Georgia, a single division of General Extension represents the eighteen institutions of a consolidated university system. In North Carolina, an association of college extension representatives publishes a composite directory of the extension activities of nine colleges. In Virginia, an agreement among colleges and the state departments of education and health defines for each its special responsibility in adult education.

THE VOCATIONAL MOTIVE IN ADULT EDUCATION

The vocational theme runs plainly through the history of what universities have done in the extension of teaching. It becomes the dominant theme at the University of Wisconsin. It is again brought out in the period of defense training.

Almost without exception the managers of extension teaching testify that the most common motive behind serious study is an

occupational motive. The bulk of extension and evening work in the past has been for teachers in the elementary and the secondary schools. Some of the most recompensing work of today is for professional men and women, practicing physicians, social workers, civil servants, lawyers, and journalists. The higher the level of adult education, the more it conforms to the true pattern of university education; but all down the line, the vocational motive seems to be the primary one in adult education.

The motive itself is surely not unworthy of the university. In the variety of educational experiences which a young man may enjoy while he is at the university, one is properly the discovery of the interests of his life work.

What is a university today? President Harper gave this answer: "I accept, with modification, a common definition: a self-governing association of men for the purpose of study, an institution privileged by the state for the guidance of the people; an agency recognized by the people for resolving the problems of civilization." Only those institutions, he continued, in which adults are associated are universities.

It would be unfair to the quotation to imply that Dr. Harper spoke here of adult education. But if his phrase is accepted literally, then the general testimony of those who work with adult students as to the motives of mature students is of interest to the universities. It may be that the lack of self-discipline, the failure in consistent study, of which we complain in college students is caused by an absence in much undergraduate work of the motives and incentives that bring an adult back to study.

THE MATTER OF CREDITS AGAIN

Many college people believe that the current practice with respect to absolute units of credit, fixed terms of study, and arbi-

trary counting of hours is not good enough. Seats of learning sometimes seem, when one is cynically minded, only places to sit while learning, or credit for learning, is passively absorbed.

The whole system of credits may now be an integral and a permanent part of our educational mechanism. There is something of poetic justice in the fact that adult educators of an earlier time helped to develop and to fasten upon American higher education the system of credits which the adult educators of today disparage. But there are advantages in having a uniform method of estimating academic progress. Students moving from one university to another carry negotiable "letters of credit—an academic bill of lading." The President of the Carnegie Foundation for the Advancement of Teaching, Dr. Walter A. Jessup, from whose report that quoted phrase is borrowed, went on to say: "The system affords almost the ultimate in flexibleness but it does not make for enduring or comprehensive knowledge within a given field."

The rise of noncredit courses in adult education would, in my opinion, be greatly accelerated if credit were attached to them. This is not merely an Irishism, for it is possible ultimately to give credit for a course of serious study, successfully completed, without attaching units of credit to each successive unit of study.

Again the common judgment of directors of extension is that students in adult classes desire credit, accepting it as the university's hallmark on sterling ware, and anticipating that sometime they may have occasion to exchange it for a diploma. A great proportion of adult students, lacking preparatory school or college credits, desire ultimately to be accredited and to be admitted to the academic procession.

Reform in the crediting procedures may be attended by some risks of loss and may be accomplished only after bitter struggles

in academic senates. It would not be so hazardous to attempt reform of the credit system outside the campus, in the extension classes. For better or for worse, the extramural divisions cover almost the whole range of educational activity, professional postgraduate study, graduate study, undergraduate study, preparatory and elementary school courses, and, if educational workshops are included in the view, nursery schools. It would be possible to experiment with new methods of grading throughout the entire system, beginning cautiously near the top, without interrupting the ordinary procedures of the classroom and of the registrar's office.

VALIDATION OF NONCREDIT STUDIES

At Harvard University the degree of Associate in Arts, now Adjunct in Arts, was established in 1910 as an alternative to the bachelor's degree. It is for students who are admitted to extension studies without examination. There are no entrance requirements. By completion of a planned course of study, a student may earn the Adjunctship in Arts and qualify for admission to a graduate school. In twenty-five years, 1913 to 1937, the degree was awarded to 150 students. An inquiry was made at the end of the period. Of the 150 students, 9 had died; replies were received from 91. Of this number, 59, or 64 per cent, had entered graduate schools; 42 had taken the master's degree; 6 had received the degree of Doctor of Philosophy.

By some such method as this, courses that do not carry formal credits may be validated.

There are other methods. For example, there are the Graduate Record Examinations,[1] developed experimentally by the Car-

[1] W. S. Learned, *The Measurement of Student Knowledge*, Carnegie Foundation for the Advancement of Teaching, 1938.

negie Foundation for the Advancement of Teaching and used for the first time in 1937 in the graduate schools of Harvard, Yale, Princeton, and Columbia. These provide norms for the student entering graduate study; even better norms are said to be available at undergraduate levels. The test could be given to any extension student and the result would be a graphic picture, measured by well-authenticated standards, of his education in his field of major interest and of his general education.

If such tests were generally available, administered by an independent board or institution, it would be possible for any student, however indifferent he had been to units of alertness and credit, to qualify at length for academic recognition.

Such an accrediting institution might also be a godsend in the whole troublesome matter of accrediting colleges and professional schools. For then each school could go its own way, preserve its individuality, and let the *students* be accredited.

This is one instance of the kind of educational experimentation appropriate to extension divisions, which could have deep significance to the whole formal organization of higher education.

THE DIFFUSION OF KNOWLEDGE

The phrase "diffusion of knowledge" has a rather quaint sound now. It belongs to the older literature of democracy. It antedates graduate schools and research institutes. It antedates extension divisions. It recalls the long history of lyceums and chautauquas and adult schools. It carries over to our time the hope of an older generation, now almost realized, to extend opportunities of education to all people.

The social significance of the universities themselves and of

the many agencies by which university teaching is extended to students outside the campus was once succinctly stated by Henry Thomas Buckle in a comparison of universities, English, German, and American, in *The History of Civilization in England:*

"In a great and comprehensive view the changes in any civilized people are, in their aggregate, dependent solely on three things: first, on the amount of knowledge possessed by their ablest men; secondly, on the direction which that knowledge takes, that is to say, the sort of subject to which it refers; thirdly, and above all, on the extent to which the knowledge is diffused, and the freedom with which it pervades all classes of society."

With that premise, Buckle continues:

"In America, we see a country of which it can truly be said [100 years ago] that in no other are there so few men of great learning, and so few men of great ignorance. In Germany, the speculative classes and the practical classes are altogether disunited; in America, they are altogether fused. . . . The stock of American knowledge is small, but it is spread through all the classes; the stock of German knowledge is immense, but it is confined to one class. Which of these two forms of civilization is the more advantageous, is a question we are not called on [100 years ago] to decide. It is enough for our present purpose, that in Germany there is a serious failure in diffusion of knowledge; and in America, a no less serious one in its accumulation. And as civilization is regulated by the accumulation and diffusion of knowledge, it is evident that no country can even approach to a complete and perfect pattern, if, cultivating one of these conditions to an excess, it neglects the cultivation of the other."

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